Roland

PROFESSIONAL
AUDIO AND VIDEO EQUIPMENT
SPRING 2011

AUDIO

DIGITAL CONSOLES
DIGITAL SNAKES
PERSONAL MIXERS
MULTI-CHANNEL RECORDERS
AUDIO RECORDERS

VIDEO

VIDEO MIXERS/SWITCHERS
VIDEO PLAYERS
FIELD RECORDERS
VIDEO CONVERTERS
VIDEO EDITORS

Roland
Systems Group

Bringing Professional Audio and Video Together

Welcome to the Roland Professional Audio and Video Equipment Spring 2011 catalog.

Roland has introduced many innovative products to the professional market over the past few years and has built a strong trust across many users and installations around the world. Through continuous development and a clear focus on professional audio/video products, Roland Systems Group is committed to providing unique solutions to improve workflow and maximize creative possibilities.

We offer solutions to many markets including: Broadcast • Education • Legal • Live Production • Sports • Theater • Theme Park • Videography • Visual Performance • Worship.

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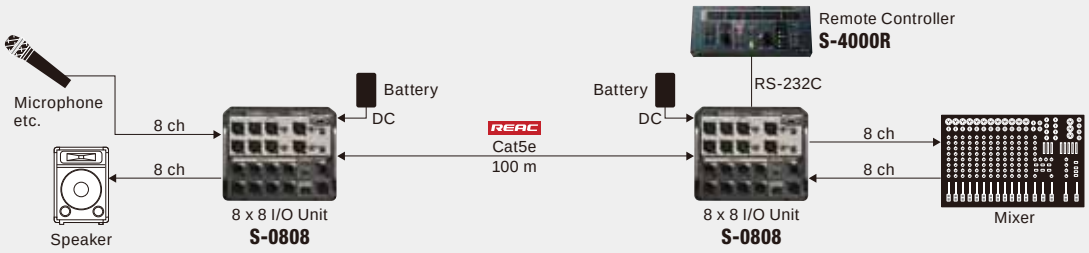
Audio Production

The V-Mixing System/Digital Snake Systems improves sound quality, reduces configuration complexity, and adds breakthrough capabilities.

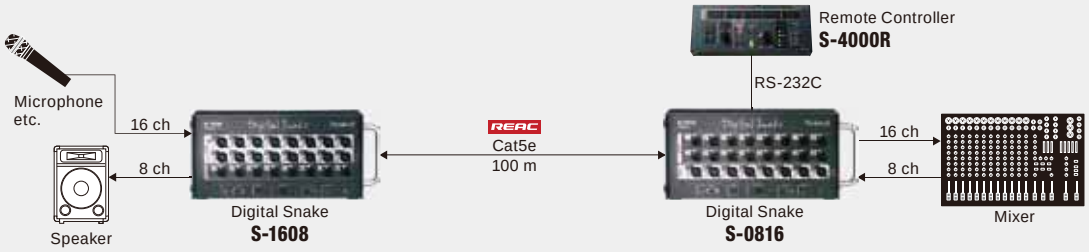
Location Sound - Digital Snake System 8 x 8 Ch with battery operation

An 8 x 8 Ch Digital Snake system enables high quality audio transmission with an easy setup. This system is ideal when AC power is not convenient or available.



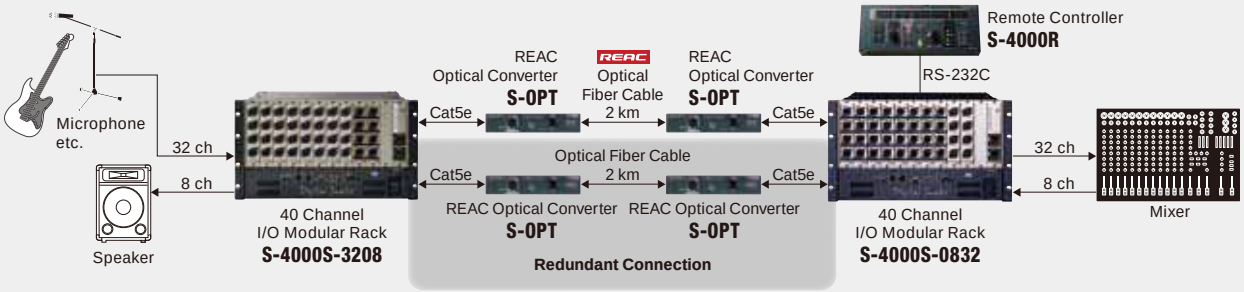
Live Event - Digital Snake System 16 x 8 Ch

Connecting the S-1608 and the S-0816 with a simple REAC (Cat5e) cable enables 16 x 8 Ch bi-directional digital audio transmission.



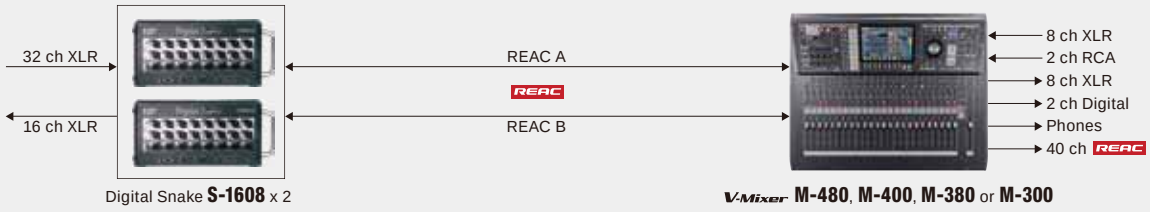
Broadcast - Long Distance Digital Audio Transmission - 32 x 8 Ch with Redundancy

By using the S-OPT REAC optical converter and optical cables (sold separately), the REAC transmission distance can be extended to a maximum of 2 kilometers. If the main cable is compromised, the system will automatically and seamlessly switch to the backup cable.



Installed Sound - Standard V-Mixing System – 42 Inputs/26 Outputs

Standard System consists of two S-1608 Digital Snakes on stage.

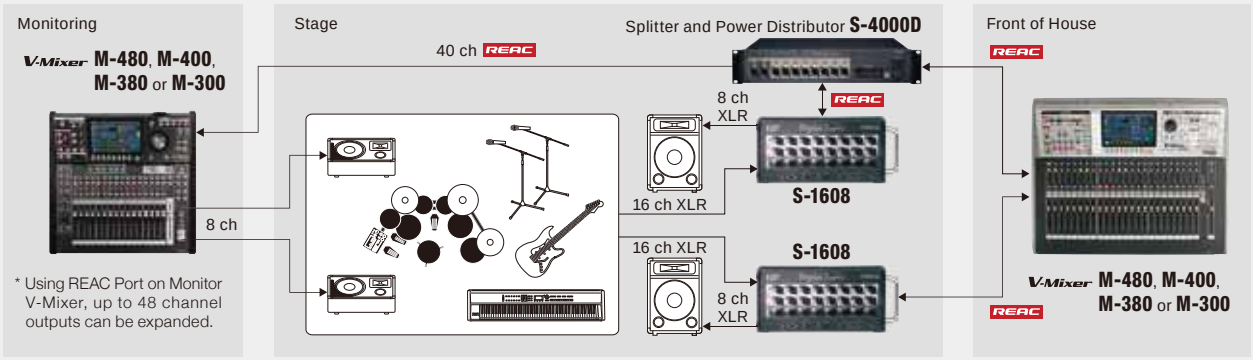


Audio Production

The V-Mixing System/Digital Snake System is configurable for any sound system along with convenient Split, Merge, and Embedded Power technology. It is not an "all or nothing" system so even your current mixing environment can be combined with the V-Mixing System.

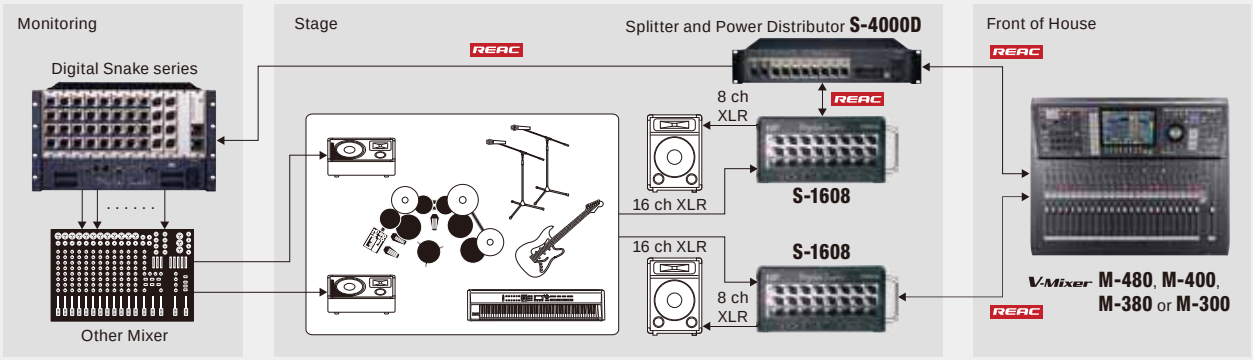
Front of House and Monitor V-Mixer Split Setup

The V-Mixing system's REAC protocol makes it easy to split the source audio signals. These splits can be used to connect to another V-Mixer as a monitor console, M-48 Personal Mixing System, or output for analog monitoring or recording requirements.



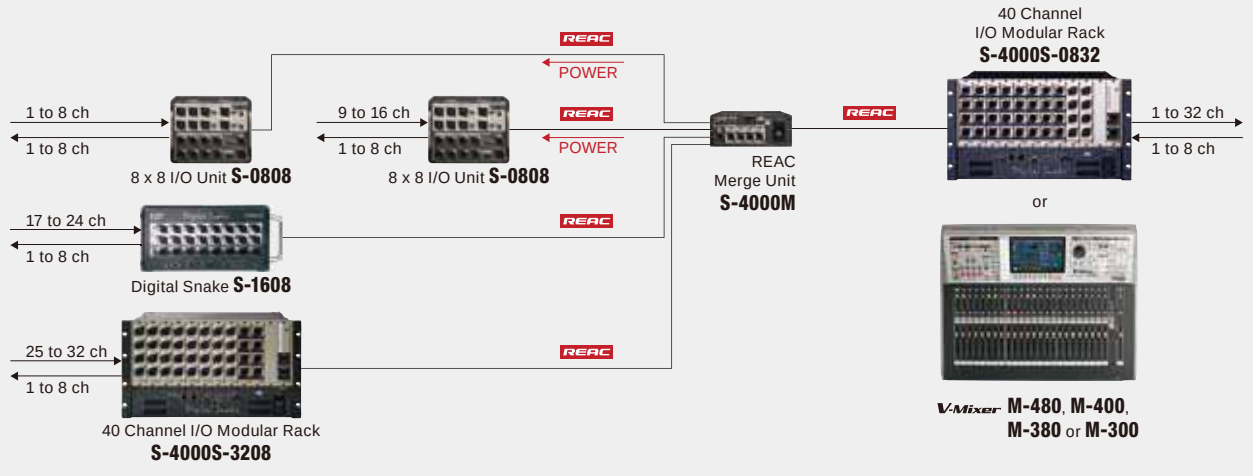
Monitoring Split Setup using Other Mixers

Any analog or digital console can be used as a monitor console with the V-Mixing System.



Merge Setup for Distributed Inputs and Outputs

Using the S-4000M, up to 4 REAC signals (up to 160 inputs) from Digital Snakes can be merged to one single REAC signal (40ch). The S-0808 can be used in a place where AC power is not available using REAC Embedded Power technology.

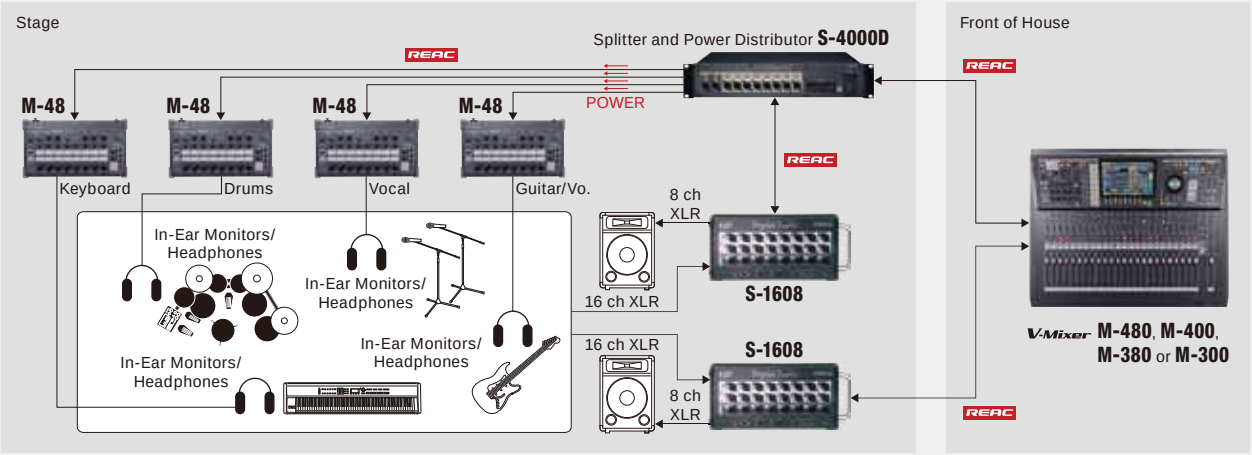


Personal Mixing

M-48 Live Personal Mixing System offers each musician the flexibility to control exactly what they want to listen to during their performance.

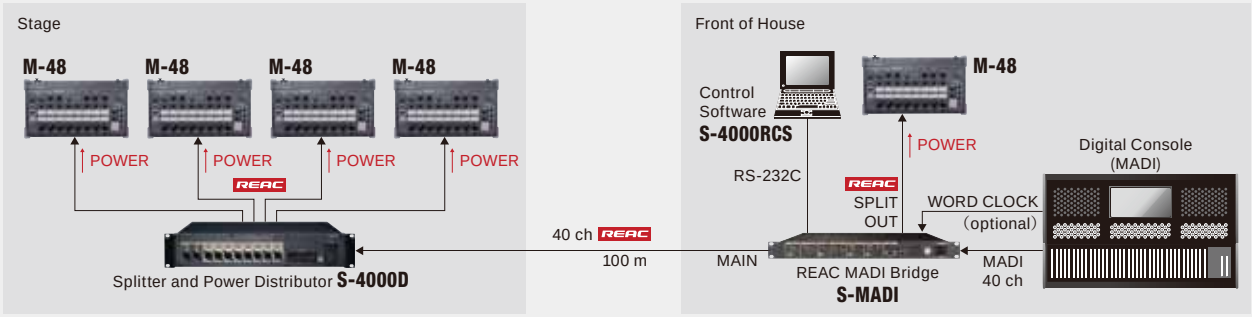
Personal Mixing Setup with V-Mixer

The M-48 enables control of up to 40 audio sources that can be managed via 16 stereo groups - assignable and unique per musician. Any V-Mixer can setup and control multiple M-48s via the S-4000D.



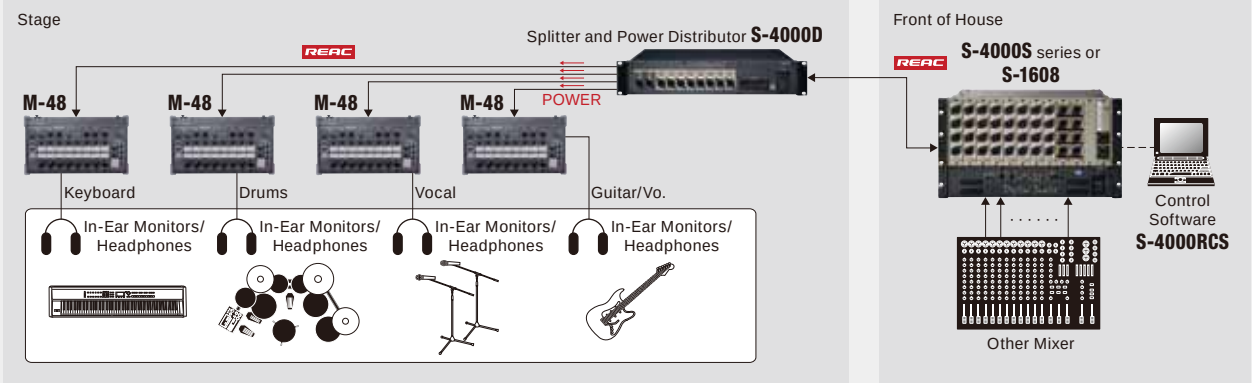
Personal Mixing Setup with Other Digital Consoles

Connect several M-48 Live Personal Mixers to a MADI equipped digital console. An additional M-48 can be connected to the SPLIT OUT port on the S-MADI that also supplies power - all over one Cat5e cable.



Personal Mixing Setup with Other Mixers

With your existing console, connect the M-48 along with the S-1608 (16 channel) or the S-4000S (40 channel) Digital Snake to utilize the complete system. The M-48 Live Digital Mixing System can be incorporated into your existing audio setup.

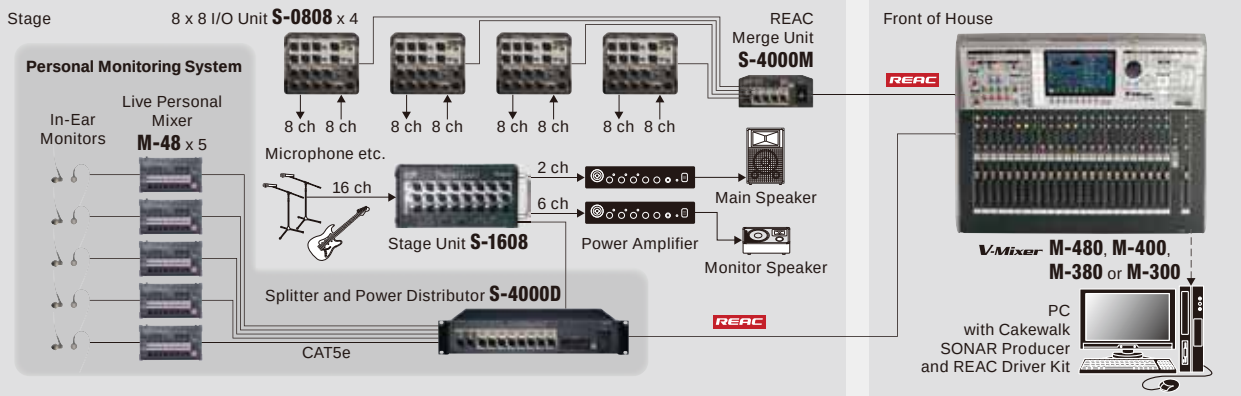


Recording/Broadcasting

A REAC-based system enables a powerful and flexible mixing/recording environment with high sound quality, intuitive operation and easy set-up.

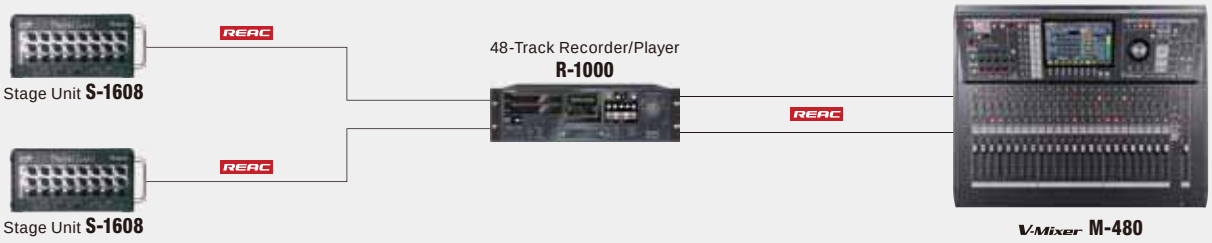
Full Digital Mixing, Monitoring and Recording Setup

This configuration enables full digital mixing, monitoring and recording. Combining the S-0808 and S-4000M offers an unparalleled setup flexibility.



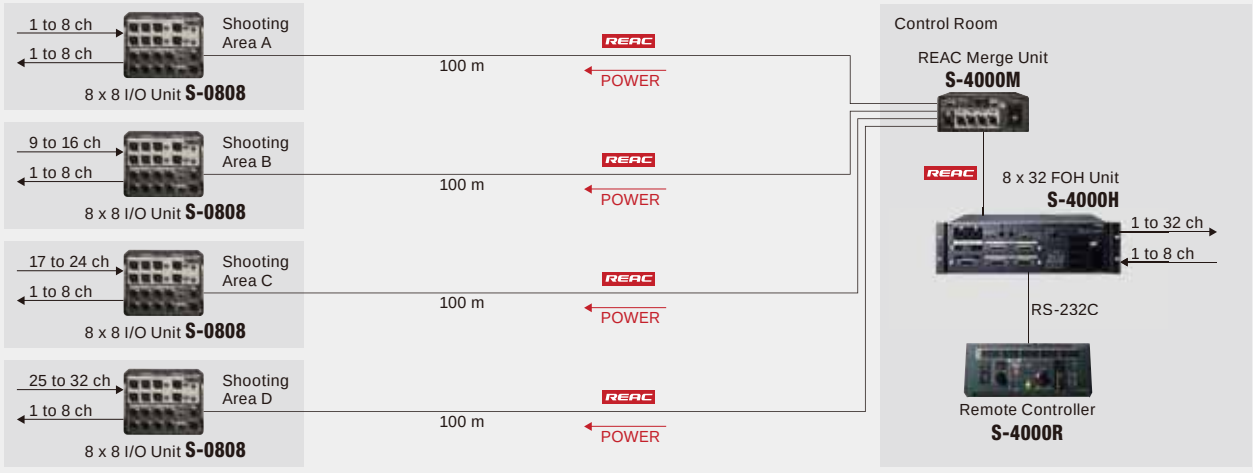
Live Recording/Playback System

Ideal concert/event configuration enabling great live sound with two S-1608 snakes and personal mixing for each musician. In addition, the R-1000 makes multi-channel live recording and virtual soundcheck possible.



Broadcasting System with Multiple Locations

This system allows I/O to be place in 4 separate locations using S-0808s. The signals from the 4 units are merged by the S-4000M as it travels to the S-4000H breakout location. Power to each of the S-0808s is supplied by the embedded power over REAC from the S-4000M.



Audio Playback

The AR series offers stable and reliable audio playback for the most demanding applications.

Compact announcement system

The AR-200R is compact and durable audio player for any environment. Its small footprint enables installation in tight spaces.

* Up to 9 phrases can be played using control terminal

Theme parks, all themed environments
Reliable, no moving part playback makes for secure, problem-free installations.

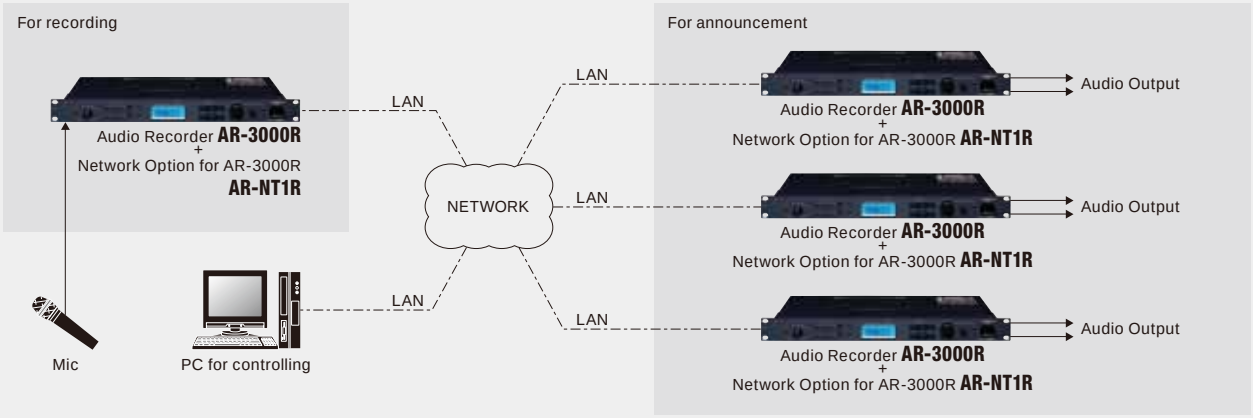
Public transportation
DC power operation and no moving parts are perfect for installations requiring rugged, reliable audio playback.

Restaurants and retail establishments for messages and special announcements
AR series ducks background music when message is played.

Museums
Flexible control options provide easy ways to trigger sounds or announcement.

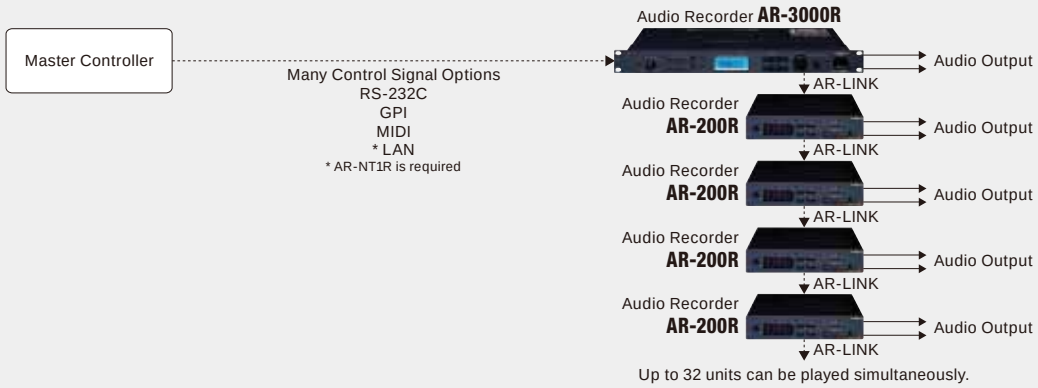
Network announcement system

With the AR-NT1R upgrade, an AR-3000R can be put on a standard Ethernet IP network. Files can then be transferred and all functions controlled over the network.



Multi-Channel Audio Playback

Using the AR-LINK function, up to 64-tracks of simultaneous playback is possible. One AR-3000R master device can lock up to 31 units of AR-3000R or AR-200R together for sample accurate playback.



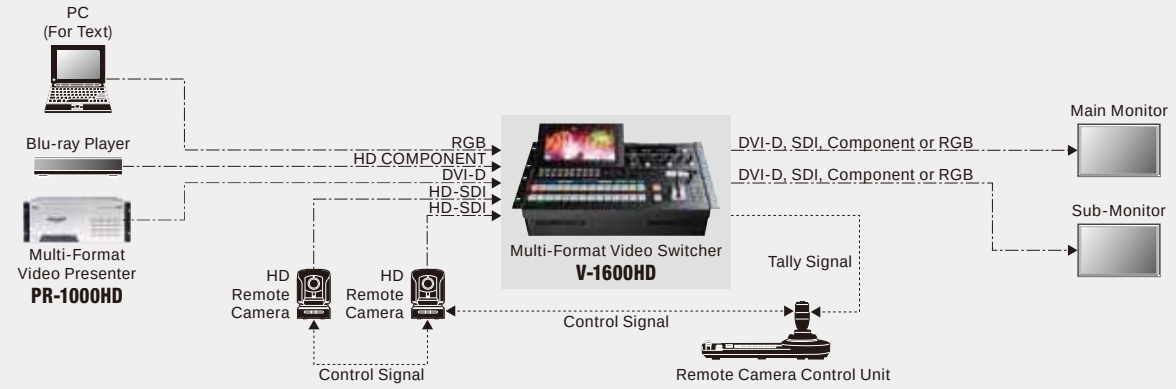
Up to 32 units can be played simultaneously.

Visual Production

Roland professional video products enable powerful, high quality live video production with intuitive operation. Clear user interfaces provide reliability and easy to use mixers and playback devices.

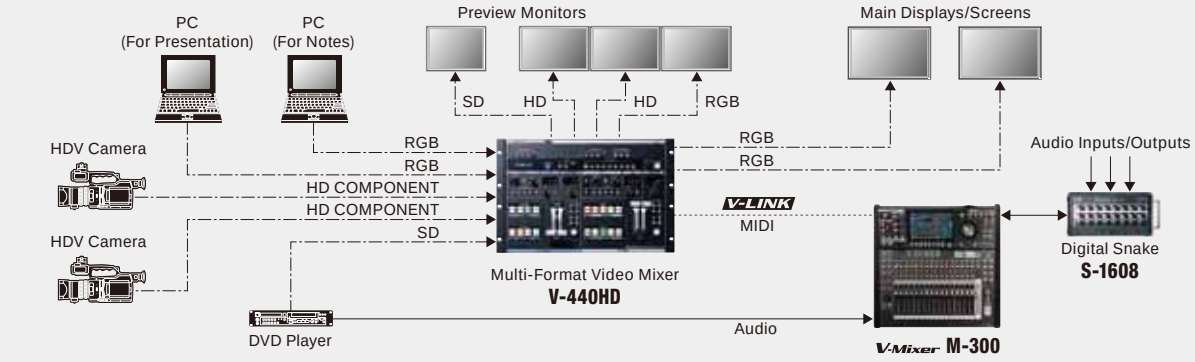
Concert/Live Stage Production

The V-1600HD enables high quality multi-format video mixing for concert/live stage productions. Many types of video formats can be input and mixed thanks to built-in scalers.



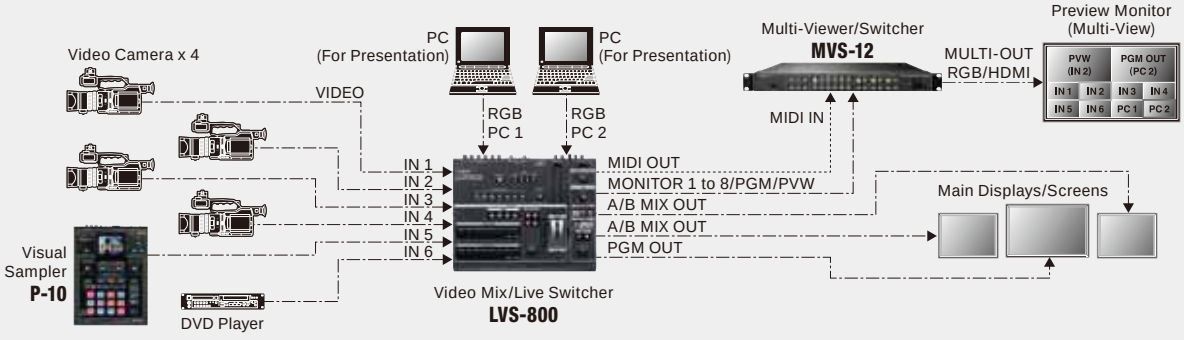
Corporate Presentation

This presentation system enables seamless video switching between different video formats - HD/SD video sources and RGB signals from PC. With V-LINK, audio faders on a Roland audio mixer follow the input selections and T-bar position of the video mixer.



Event Production

Graphics and text from a PC can be composited over video sources. Additionally, independent outputs from the A/B mix and Program out busses can be sent to different screens creating exciting multi-screen environments.

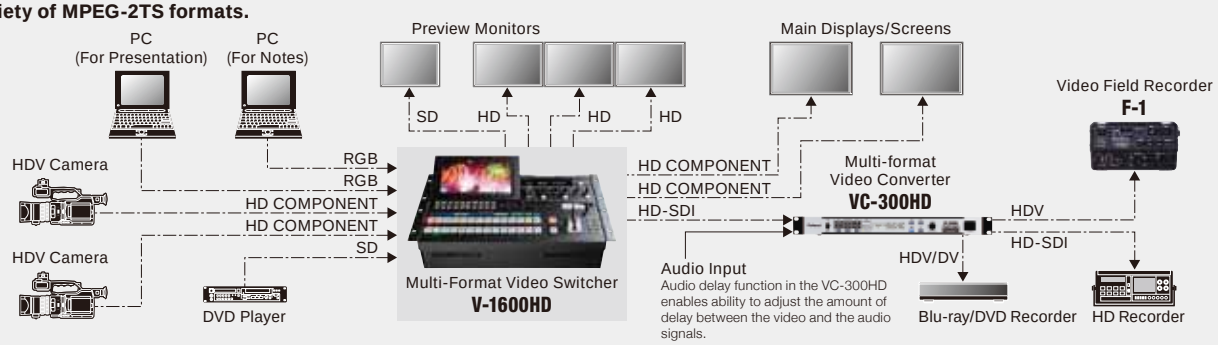


Video Recording

Roland Field Recorders are ideal for portable, high quality and extended video recording applications. A variety of power supply options such as AA battery, external buttery and AC adaptor enables recording at any location at anytime.

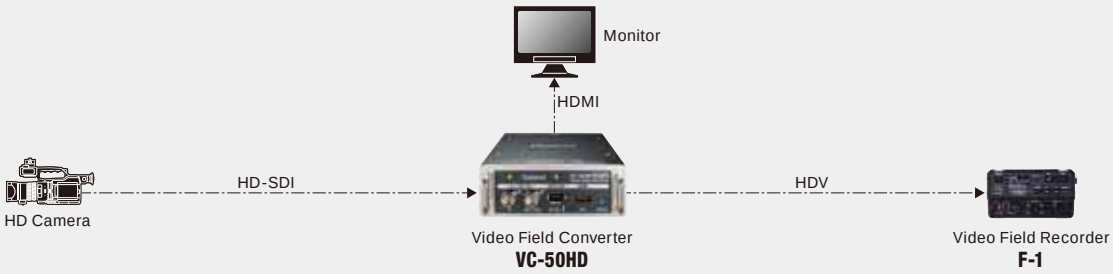
Live Event Recording

This example illustrates affordable and reliable HD video recording of live events. The VC-300HD combines video and audio, and converts to a variety of recording video formats. The F-1 stores the recorded audio and video data via IEEE 1394 in HDV, DV or a variety of MPEG-2TS formats.



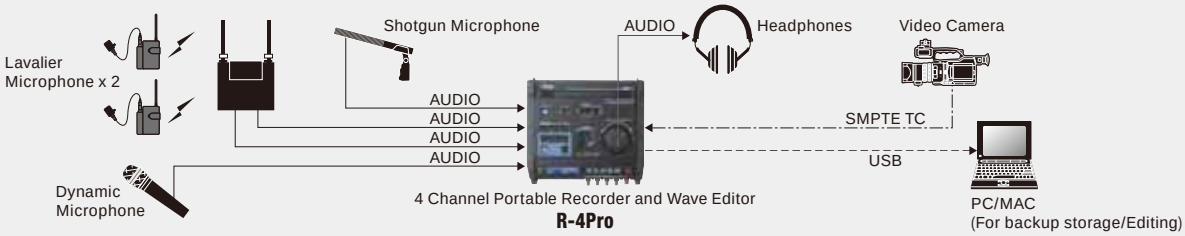
Observation/Medical Research

This example configuration enables high quality and continuous audio and video recording. The VC-50HD converts HD-SDI to HDV and sends it to the F-1 - which can record up to 9 hours in HDV format. Additionally, when a lower MPEG 2 TS bit rate is selected for recording, up to 27-hours in HD and four days in SD is possible.



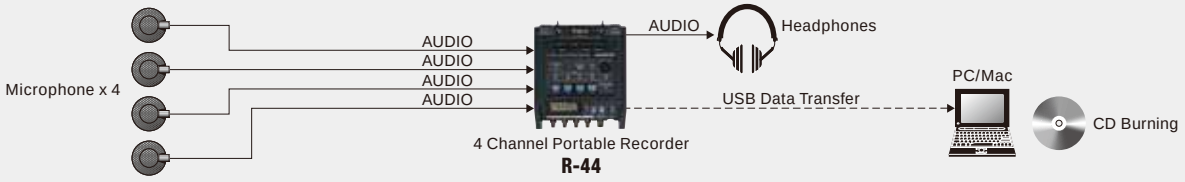
Video/DSLR Shooting

The R-4 Pro is the flagship four channel audio field recorder ideal for professional videographers who need synchronized audio and video recording using SMTPE timecode. Also works well when shooting with DSLR camera which has limited audio capabilities.



Conference Recording

This example is a typical setup for recording conferences. The R-44 captures four channels of uncompressed audio from table microphones. The recorded audio can then be transferred via USB to a PC/Mac to burn CD's or transfer to flash drives for attendees.

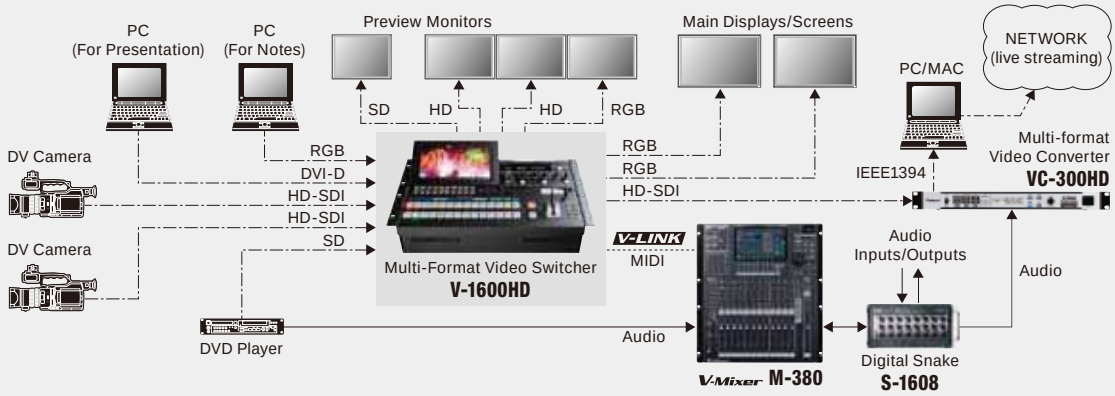


AV Installation

Integrating Roland Professional Audio and Video products together enables efficient and flexible system suitable for many applications.

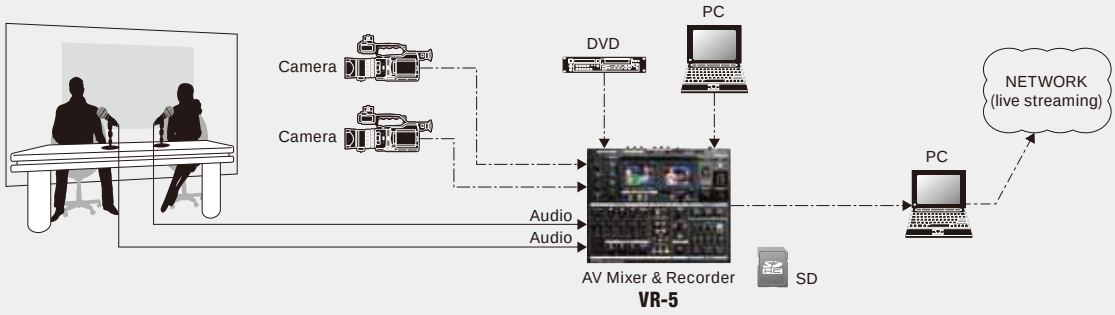
Theater/Church/Conference room with HD streaming

This presentation system enables seamless video switching between a variety of video formats - HD/SD video sources and RGB signals from PC. With V-LINK, audio faders on the audio mixer follow the input selections and T-bar position of the video mixer. Both the video and audio signal are then routed into the VC-300HD which embeds them together as a firewire signal ready to send to a live streaming service running on a PC/Mac.



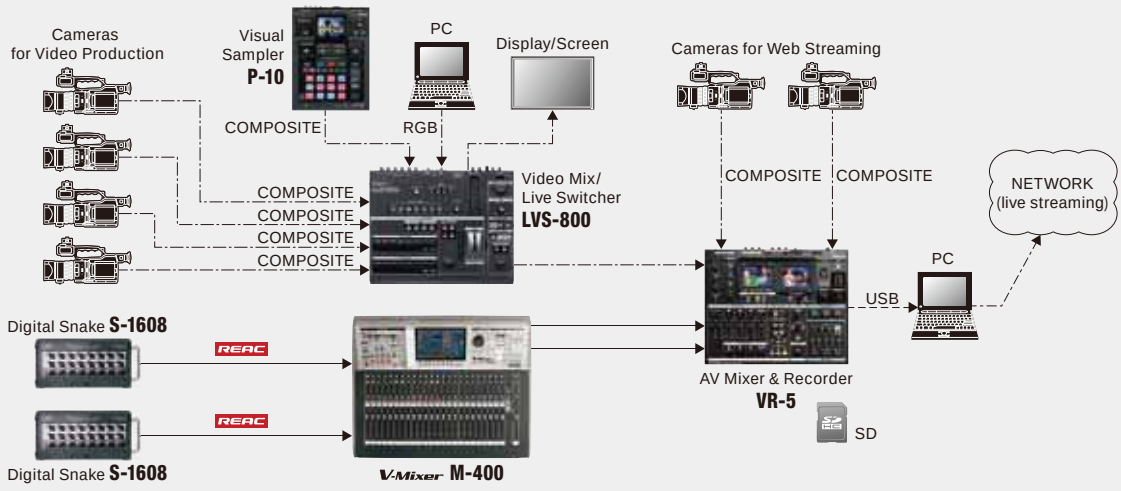
Live Video Production and Web Streaming

The VR-5 has all the necessary functions for live production including an audio mixer, video switcher, scan converter, video recorder, media player and video output via USB. With VR-5, a live web broadcasting environment becomes simple and easy to operate.



Live Stage/Church production with live broadcasting

Use the VR-5 in any existing production environment to create a unique broadcast feed to the web.



AUDIO EQUIPMENT

Digital Consoles

Model	Mixing Channel	Bus	Matrix	FX Return CH	Fader	REAC port	Console Analog I/O	Cascade	USB Memory Playback/Rec.
M-480	48	19	8	6 stereo	25	3	10 in/8 out	●	●
M-400	48	18	8		25	3	10 in/8 out		●
M-380	48	18	8		13	3	10 in/8 out		●
M-300	32	11	4		17	2	12 in/8 out		●

Digital Snakes

Model	XLR Input	XLR Output	TRS Input (Hi-Z Input)	REAC/Power Redundant	MIDI	Connection with V-Mixer	Embedded Power Operation
S-4000S-3208	32	8		●	●	●	
S-4000S-0832	8	32		●	●	●	
S-4000H	8 (Line level)	32		●	●		
S-1608	16	8				●	
S-0816	8	16				●	
S-0808	8	8	4 (2)			●	●

Personal Mixers

Model	Input Source	Monitoring Channels	3-band EQ	Reverb	Limiter	Ambient Mic	Embedded Power Operation
M-48	40	16 Stereo Groups	●	●	●	●	●

Multi-Channel Recorders

Model	Recording Channel	Playback Channel	Input	Output	Editing	WordClock	VideoSync	External Control
R-1000	48	48	REAC	REAC, 2 XLR		●	Black Burst	MIDI, RS-232C, GPI
SONAR	40 (via REAC)		REAC		●			

Audio Recorders

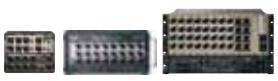
Model	Maximum number of Phrases	Control Terminal	RS-232C	MIDI	DC Power Operation	AR-LINK	Network Control Option	Phrase Editing
AR-3000R	2000	16	●	●		Master/Slave	●	●
AR-200R	1000	9		●	9-24V	Slave		

■ How to Configure a V-Mixing System

Step 1

Decide on inputs/outputs

There are a number of I/O configuration choices.
Select based on size, i/o count, and modularity.



S-0808 S-1608 S-4000S

Determine if you need additional splits for monitoring, recording or distribution to multiple places. You can also distribute your main i/o units together into a merged REAC signal.

S-4000D S-4000M

Step 2

Choose a Console

There are four choices of consoles to choose from.
Differences center around:
- Mixing Channels
- Processing Power
- Number of Faders
- Size and rackmount ability

M-480 M-400

M-380 M-300

Step 3

Choose Monitoring Solution

Monitoring needs can be addressed by adding the M-48 Personal Mixing option, another V-Mixer as a monitor console, or the combination of both.

The M-48 offers musicians the flexibility to control exactly what they want to listen to during their performance.

M-48

Add an additional V-Mixer to create a monitor position that can control wedges and/or any M-48 personal mixers connected taking the burden off of the FOH position.

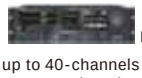
M-300

Step 4

Choose Recording/ Playback Solution

Multi-channel recording and playback can be added by using a simple Cat5/6 cable from a split point.

Record/play back up to 48-channels of audio using the Roland R-1000 Multi-Channel Recorder/Player.



R-1000

Capture up to 40-channels of audio to a computer using the SONAR REAC Recording solution.

SONAR

REAC | Roland Ethernet Audio Communication

REAC

REAC (Roland Ethernet Audio Communication) is Roland's original technology for low latency, high quality digital audio transfer. Products using REAC technology are installed today in many venues and have been used for high profile events worldwide.

REAC technology provides many system advantages and powerful digital benefits

Reliability and Superb Quality

Up to 24-bit/96kHz Sound

REAC transfers 40 Channels of Audio in each direction at 24-bit and up to 96 kHz including control messages all over a single Cat5e/6 Ethernet Cable or Optical link.

Superb Quality AD/DA Circuit

The cornerstone of digital sound is the AD/DA circuit. REAC products have been specially designed for live audio applications and are made of high quality components carefully selected by Roland engineers.

Digital Audio Signal Transfer

The digital audio signal sent by REAC over Cat5e/6 Ethernet cables avoids signal quality losses, ground hums, or other interference typically found with analog snakes.

Redundancy

Cabling and Power Supply Redundancy for S-4000S series provides a secure audio transmission system, and the automatic continuation of audio transfer even in cases where one of the cables is accidentally damaged.

Easy and Intuitive

No IP Address Setup

Devices are automatically recognized by the system and the appropriate menus present themselves.

Simple User Interface

Dedicated knobs/buttons and simple user interface eliminate any confusion when having to make quick adjustments.

Light Weight/Small Footprint

REAC provides pristine digital audio in a very light weight, inexpensive and easy to install cable format.

REAC Embedded Power

"REAC Embedded Power" is a unique Roland technology that enables the transfer of not only the digital audio signal but also the power required by the connected device - all via one Cat5e/6 cable.

System Expandability and Flexibility

Personal Mixing

The next generation live personal mixer offers musicians the unprecedented flexibly to control exactly what they want to listen to during their performances.

Live Multi-Channel Recording/Playback

Simply plug a Cat5e/6 cable into a computer installed with Cakewalk SONAR PRODUCER and capture up to 40 channels of live audio. Alternately connect to an R-1000 48-Track Recorder/Player for dedicated recording of up to 48 channels along with Virtual Soundcheck and selective multi-channel playback capabilities.

Analog Solution

With your existing console, connect the Digital Snake to take advantage of the sound quality benefits. The next generation of digital audio system can be incorporated into your existing system.

V-LINK

Audio Faders on the V-Mixer follow the input selections and T-bar position of Roland Video Mixers.

V-Mixer M-480 | Live Mixing Console

Flagship console with new world-class powerful mixing engine

NEW

- **48 Channels/19 Buses/8 Matrices/6 stereo FX return channels with 6 dual/mono effects processors, twelve 31-band GEQs/8-band PEQs**
- **Connect to any Roland Digital Snake for a total capacity of 90 inputs by 90 outputs**
- **Three built-in REAC ports allows flexible system expansion**
- **4-band PEQ, channel dynamics and delay on all mixing channels**
- **4-band PEQ, Limiter and Delay on all output buses**
- **Channel direct outputs**
- **Cascade function for up to 96ch mixing with two M-480**
- **56-bit internal processing**
- **Large, bright 800 x 480 LCD color screen**
- **100 mm touch sensitive motorized faders**
- **USB memory player/recorder**
- **Scene recall with preamp gain**
- **Remote control and offline setup using a PC**
- **Support for M-48 Personal Mixing System**
- **Direct connection with PC or R-1000 for multi-channel recording**
- **V-LINK provides an automatic audio follows video mix**

The large, bright 800 x 480 color LCD gives a very clear view of all the V-Mixer's parameters

●Channel Display

Channel Editing Display is a familiar and easy-to-use analog-style layout of channel parameters.

●Channel EQ

Dedicated screen for editing channel EQ. Change values quickly using the dedicated knobs.

●Meter

Large overview screen provides quick view of all channels meters and faders position.

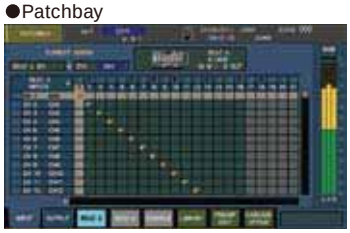
●EFFECTS

View and edit the 6 stereo, high-quality FX for channel/bus inserts such as reverb, delay, channel strip.

●GEQ/PEQ

Setup screen for twelve 31-band Graphic EQs or 8-band Parametric EQs.

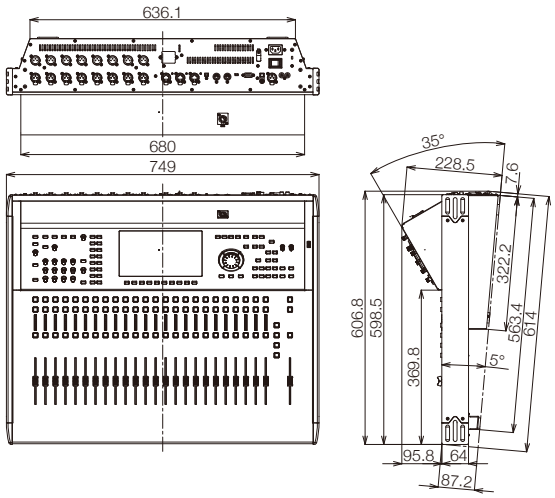
●Patchbay



Large, intuitive screen for routing any stage or console input to mixer channels and assigning buses to outputs.

Cascade

Cascade connection enables up to 96 mixing channels by connecting two M-480s via a single Cat5e/6 cable. A Master console can share AUX/Matrix/Main/Solo buses of a Slave console. A large format mixing system can be configured with minimum footprint.



Unit: mm

V-LINK enables synchronization with video equipments

M-480 supports V-LINK for synchronizing with video equipment. Combine with the V-1600HD Multi-Format Video Switcher allows "audio follows video".

SPECIFICATIONS M-480

Mixing Channels	INPUT: 48 channels, 6 stereo returns BUS: MAIN L/C/R, 16 AUX buses, 8 MATRIX buses OUTPUT: 10 ports (Max 90 ports When using REAC devices)
Internal processing	56 bits
AD/DA Conversion	24-bit/48.0 kHz or 44.1 kHz
Network Latency	2.8 mS (typ.) * Total System Latency of audio signal from S-1608 inputs to outputs via M-480's REAC ports (A or B). * Sample Rate: 48.0 kHz * Effects : No insert effects
CONSOLE INPUT jacks (1 to 8)	XLR-3-31 type (balanced, phantom power)
TALKBACK MIC IN jack	XLR-3-31 type (balanced, phantom power)
STEREO IN jacks (L/R)	RCA phono type
CONSOLE OUTPUT jacks (1 to 8)	XLR-3-32 type (balanced)
PHONES jack	Stereo 1/4 inch phone type
DIGITAL OUT jacks Stereo	Optical type, Coaxial type
REAC Ports	RJ-45 EtherCon type
USB connectors	USB Type A and Type B
Remote Controls	RS-232C connector: 9-pin D-sub type MIDI connectors (OUT/THRU, IN): 5-pin DIN type
Other Connectors	GND Terminal, LAMP connector XLR-4-31 type
Frequency Response	CONSOLE OUTPUT jacks (1 to 8): -2 dB / +0 dB (20 k ohms load, +4 dBu, typ.) PHONES jack: -3 dB / +0 dB (40 ohms load, 150 mW, typ.)
Total Harmonic Distortion + Noise	CONSOLE OUTPUT jacks (1 to 8): 0.05 % (+4 dBu, typ.) PHONES jack: 0.05 % (typ., 40 ohms load, 150 mW, typ.)
Dynamic Range	CONSOLE OUTPUT jacks (1 to 8): 110 dB (typ.)
Crosstalk@ 1 kHz	CONSOLE INPUT jacks (1 to 8): -80 dB (Pad: ON, Input gain: +10 dBu, typ.), CONSOLE OUTPUT jacks (1 to 8): -100 dB (typ.)
Nominal Input Level (Variable)	CONSOLE INPUT jacks (1 to 8): -65 to -10 dBu (Pad: OFF) or -45 to +10 dBu (Pad: ON), (typ.), STEREO IN jacks (L / R): -18 to 0 dBu, TALKBACK MIC IN jack: -50 to -10 dBu
Input Impedance	CONSOLE INPUT jacks (1 to 8): 14 k ohms, STEREO IN jacks (L / R): 10 k ohms, TALKBACK MIC IN jack: 41 K ohms
Non Clip Maximum Input level	CONSOLE INPUT jacks (1 to 8): +8 dBu (Pad: OFF) or +28 dBu (Pad: ON), (typ.), STEREO IN jacks (L / R): +18 dBu (typ.), TALKBACK MIC IN jack: +8 dBu (typ.)
Nominal Output Level	CONSOLE OUTPUT jacks (1 to 8): +4 dBu (Load impedance: 10 k ohms, typ.)
Output Impedance	CONSOLE OUTPUT jacks (1 to 8): 600 ohms PHONES jack: 100 ohms
Recommended Load Impedance	CONSOLE OUTPUT jacks (1 to 8): 10 k ohms or greater PHONES jack: 8 ohms or greater
Non Clip Maximum Output level	CONSOLE OUTPUT jacks (1 to 8): +22 dBu (1 kHz, 10 k ohms load, typ.) PHONES jack: 150 mW + 150 mW (1 kHz, 40 ohms load, typ.)
Residual Noise Level (IHF-A, typ.)	-88 dBu (All faders: Min)
Equivalent Input Noise Level (E.I.N.)	-126 dBu
Display	800 x 480 dots Wide VGA backlit TFT color screen
Power Supply	AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)
Power Consumption	95 W
Dimensions	749.0 (W) x 614.0 (D) x 228.5 (H) mm 29-1/2(W) x 24-11/16(D) x 9-1/16(H) inches
Weight	20 kg, 44 lbs 1 oz

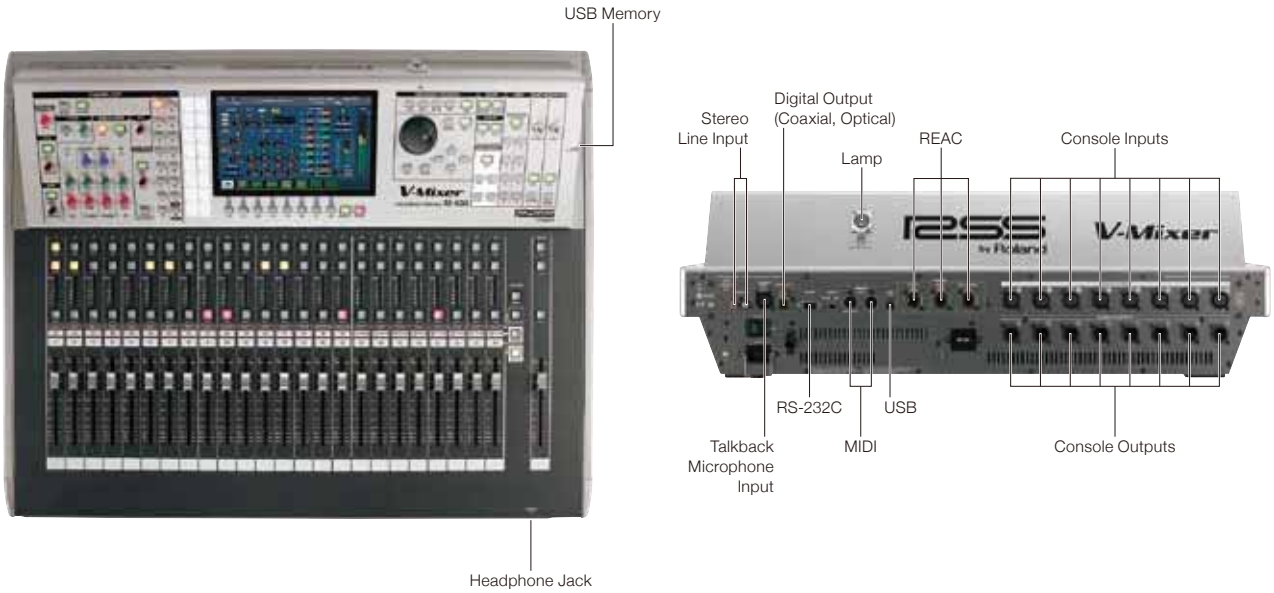
* XLR type: 1 GND, 2 HOT, 3: COLD
* phantom power: DC +48 V(unloaded maximum), 14 mA(maximum load) (All XLR type inputs)
* LAMP power: DC +12 V/500 mA
* When a REAC Splitter&Distributor S-4000D or a switching hub is used in-line with REAC cables, the network latency will increase by the amount of processing delay introduced by the splitting device itself. The actual delay is dependant upon the specifications of the splitting device, though the maximum delay amount for a single splitting device should be about 200 microseconds.
* EtherCon is the registered trade mark of Neutric®

V-Mixer M-400 | Live Mixing Console
V-Mixer M-380 | Mixing Console

Breakthrough 48-channel full digital mixing consoles

REAC
V-LINK
USB MEMORY

M-400



M-380

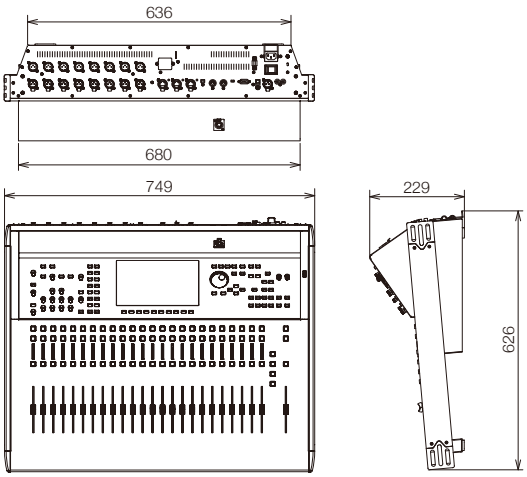
- 48 Channels/18 Buses/8 Matrices with 4 dual/mono effects processors, 31-band GEQs/8-bands PEQs
- Built-in REAC ports allows flexible system expansion
- 56-bit internal processing
- Large, bright 800 x 480 LCD color screen
- 100 mm touch sensitive motorized faders
- Direct connection with PC for multi-channel recording
- USB memory player/recorder
- Scene recall with preamp gain
- Remote control and offline setup using a PC
- Support for M-48 Personal Mixing System
- V-LINK provides an automatic audio follows video mix

PAR Excellence Award 2007

RENTAL & STAGING SYSTEMS Award InfoComm 2008

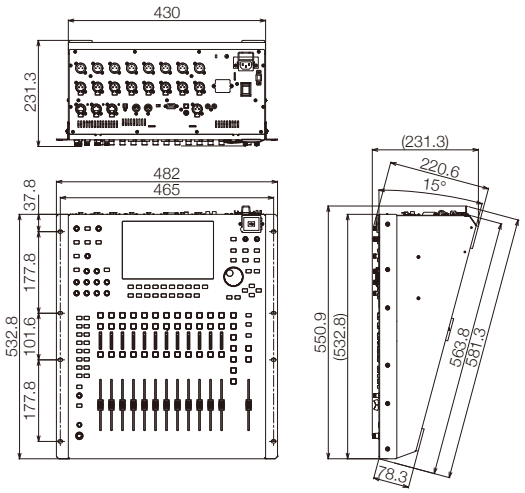
WFX New Product Award 2008

M-400 Dimension



Unit: mm

M-380 Dimension



Unit: mm

M-400 RCS/M-380 RCS - Remote control software

Free download from
www.rolandsystemsgroup.net

SPECIFICATIONS M-400/M-380

Number of Channels	48 inputs, 18 buses, 8 MATRIX
Internal processing	56 bits
AD/DA Conversion	24-bit/48.0 kHz, 44.1 kHz
Network Latency	2.8 mS (typ.) * Total System Latency of audio signal from S-1608 inputs to outputs via M-400's REAC ports (A or B). * Sample Rate: 48.0 kHz * Effects: No insert effects
CONSOLE INPUT jacks (1 to 8)	XLR-3-31 type (balanced, phantom power)
TALKBACK MIC IN jack	XLR-3-31 type (balanced, phantom power)
STEREO IN jacks (L/R)	RCA Pin type
CONSOLE OUTPUT jacks (1 to 8)	XLR-3-32 type (balanced)
PHONES jack Stereo	1/4 inch phone type
DIGITAL OUT jacks	Optical type, Coaxial type
REAC Ports	RJ-45 EtherCon type
USB connectors	Type A, Type B
Remote Control connectors	RS-232C connector 9-pin D-sub type MIDI connectors (OUT/THRU, IN) 5-pin DIN type
Other connectors	GND terminal, LAMP connector XLR-4-31 type (M-400 only)
Frequency Response	CONSOLE OUTPUT jacks (1 to 8): -2 dB / +0 dB (20k-ohms load, +4 dBu), PHONES jack: -3 dB/+0 dB (40-ohms load, 130 mW)
Total Harmonic Distortion + Noise	CONSOLE OUTPUT jacks: (1 to 8) 0.05 % (typ., +4 dBu) PHONES jack: 0.05 % (typ., 40-ohms load, 130 mW)
Dynamic Range	CONSOLE OUTPUT jacks (1 to 8): 110 dB (typ.)
Cross Talk @ 1 kHz	CONSOLE INPUT jacks (1 to 8): -80dB (Pad: ON, Input gain: +10 dBu, typ.), CONSOLE OUTPUT jacks (1 to 8): -100 dB (typ.)
Nominal Input Level (Variable)	CONSOLE INPUT jacks (1 to 8): -65 to -10 dBu (Pad: OFF) or -45 to +10 dBu (Pad: ON), STEREO IN jacks (L/R): -18 to 0 dBu, TALKBACK MIC IN jack: -50 to -10 dBu
Input Impedance	CONSOLE INPUT jacks (1 to 8): 14 k-ohms, STEREO IN jacks (L/R): 10 k-ohms, TALKBACK MIC IN jack: 41 k-ohms
Non Clip Maximum Input level	CONSOLE INPUT jacks (1 to 8): +8 dBu (Pad: OFF) or +28 dBu (Pad: ON), STEREO IN jacks (L/R): +18 dBu, TALKBACK MIC IN jack: +8 dBu

Nominal Output Level	CONSOLE OUTPUT jacks (1 to 8): +4 dBu (Load impedance: 10k-ohms)
Output Impedance	CONSOLE OUTPUT jacks (1 to 8): 600-ohms, PHONES jack: 100-ohms
Recommended Load Impedance	CONSOLE OUTPUT jacks (1 to 8): 10 k-ohms or greater, PHONES jack: 8-ohms or greater
Non Clip Maximum Output level	CONSOLE OUTPUT jacks (1 to 8): +22 dBu (1 kHz, 10k-ohms load), PHONES jack: 150 mW + 150 mW (1 kHz, 40-ohms load)
Residual Noise Level (IHF-A, typ.)	-88 dBu (All faders: Min)
Equivalent Input Noise Level (E.I.N.)	-126 dBu
Display	800 x 480 dots Wide VGA backlit TFT color
Power Supply	AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)
Power Consumption	M-400: 95 W, M-380: 75 W
Dimensions	M-400: 749.0 (W) x 626.0 (D) x 229.0 (H) mm 29-1/2 (W) x 24-11/16 (D) x 9-1/16 (H) inches M-380: [Desktop] 482.0 (W) x 581.3 (D) x 220.6 (H) mm 19 (W) x 22-15/16 (D) x 8-11/16 inches [Rack mount] 482.0 (W) x 231.3 (D) x 550.9 (H) mm 19 (W) x 9-1/8 (D) x 21-11/16 (H) inches * EIA-12U
Weight	M-400: 19.8 kg, 43 lbs. 11 oz. M-380: 14.0 kg, 30 lbs. 14 oz.

* XLR connector (1: GND, 2: Hot, 3: Cold)
* Phantom Power: DC +48V (Unloaded maximum), 14mA (Maximum load) (All XLR type inputs)
* LAMP: DC +12 V/500 mA
* When a REAC Splitter S-4000-SP or a switching hub is used in-line with REAC cables, the network latency will increase by the amount of processing delay introduced by the splitting device itself. The actual delay is dependent upon the specifications of the splitting device, though the maximum delay amount for a single splitting device should be about 200 microseconds.
* EtherCon is the registered trade mark of Neutric®

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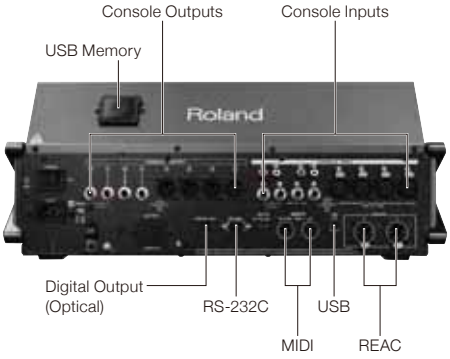
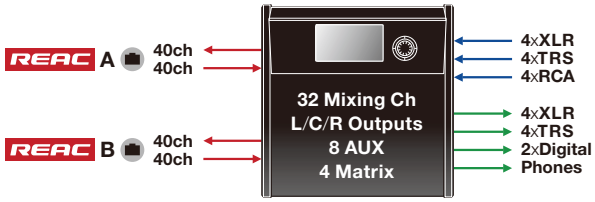
V-Mixer M-300 | Live Mixing Console

A powerful and compact digital mixing console



- **32 mixing channels, L/C/R outputs, 8 AUX buses, 4 Matrices**
- **Built-in REAC ports allows flexible system expansion**
- **4-band PEQ and dynamics on all channels**
- **11 different built-in multi-effects/ PEQ and delay on all outputs**
- **100 mm motorized faders**
- **24bit AD/DA for high-quality sound remotely controllable from a PC**
- **Record to /playback from USB flash memory**
- **Perfectly integrates with the Digital Snake for simple and high-quality audio transmission, distribution, splits and merging**
- **Construct a flexible and powerful system by adding the Personal Mixing System, multi-channel recording and other REAC components**

Two built-in REAC ports allows flexible system configuration



V-Mixer series - Control Features and Options

●Control remotely from a PC

V-Mixers can be controlled remotely in real-time from a PC (Windows) connected via the USB port. Mixing functions on the V-Mixer can be operated directly from a PC by using the RCS dedicated control software which has the same GUI as the V-Mixer color display. (The RCS for the specific V-Mixer can be downloaded from the Roland Systems Group website.) The RCS can also be operated in offline mode, allowing data for various settings to be created in advance and saved to a USB memory drive. When you get to the venue, load the settings and jump right into sound check and rehearsal.

●V-LINK - Audio and Visual Solution

By connecting the MIDI input/output to the video switcher such as the V-1600HD, V-LINK automatically synchronizes the audio of the V-Mixer with the visual images allowing "audio follows video".

●Control remotely using a wireless LAN

By enabling VNC or Remote Desktop Connection on a local PC directly connected to the V-Mixer via USB, the console can be controlled remotely from another PC or tablet using a wireless LAN. A tablet PC can be used to control the V-Mixer from a remote location. For example, you can be seated in the audience adjusting the house mix during the event, or stand onstage to adjust the monitor mix while consulting the stage performer.

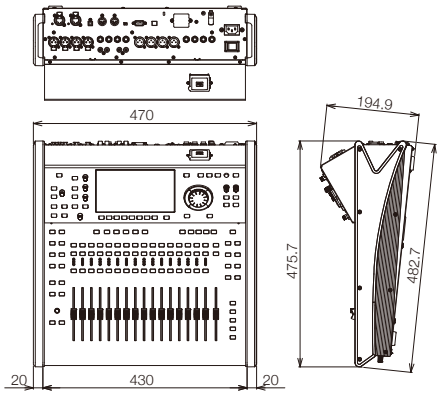
●Multi-channel recording

Forty channels of 24-bit audio can be recorded directly to a PC (Windows) by connecting a REAC port to the gigabit Ethernet port on the PC via a single Cat5e cable. Audio is recorded as individual WAV files using Cakewalk SONAR* and can be mixed after recording using the powerful digital audio tools and effects in SONAR. Alternatively you can use the new R-1000 48-Track Recorder/Player to record or playback multi-channel audio.

* To use this feature, the REAC driver is required in addition to SONAR.

USB memory recorder/player

Record the output of the V-Mixer Main, assigned AUX bus or MATRIX bus directly to a USB memory drive connected to the built-in USB port. A mix produced with the V-Mixer can be saved as an uncompressed WAV file, without the need for an external recorder. WAV files on the USB memory drive can also be played back on the V-Mixer and used for background music/tracks. User settings and mixer data can also be saved to a USB memory drive. The USB recording function is available on all V-Mixer Consoles.



Unit: mm

Option

RA-10U
Rackmount Angle
Rackmountable to 19-inch rack (EIA)

SPECIFICATIONS M-300

PROCESSING

Number of Channels	32 mixing channels/11 buses/4 MATRIX buses/Up to 92 inputs and 90 outputs when using REAC Devices
AD/DA Conversion	24-bit/48.0 kHz or 44.1 kHz
Network Latency	2.8 mS (typ.) * Total System Latency of audio signal from S-1608 inputs to outputs via M-300's REAC ports (A or B). * Sample Rate: 48.0 kHz * Effects: No insert effects

CONNECTORS

CONSOLE INPUT jacks (1 to 4)	XLR-3-31 type (balanced, phantom power)
CONSOLE INPUT jacks (5 to 8)	1/4 inch Phone type (balanced)
CONSOLE INPUT jacks (9 to 12)	RCA Pin type
CONSOLE OUTPUT jacks (1 to 4)	XLR-3-32 type (balanced)
CONSOLE OUTPUT jacks (5 to 8)	1/4 inch Phone type (balanced)
PHONES jack	Stereo 1/4 inch phone type
DIGITAL OUT jack	Optical type
REAC port	RJ-45 EtherCon type x 2
USB port	Type A x 1, Type B x 1
Remote Connectors	RS-232C connector: 9-pin D-sub type MIDI connectors (OUT/THRU, IN): 5-pin DIN type
Other Connectors	Grounding terminal AC INPUT connector

INPUT/OUTPUT CHARACTERUSTUCS

Frequency Response	CONSOLE OUTPUT jacks (1 to 8): -2 dB / +0 dB (20k ohms load, +4 dBu) PHONES jack: -3 dB / +0 dB (40 ohms load, 150 mW)
Total Harmonic Distortion + Noise	CONSOLE OUTPUT jacks (1 to 8): 0.05 % (typ., +4 dBu) PHONES jack: 0.05 % (typ., 40 ohms load, 130 mW)
Dynamic Range	CONSOLE OUTPUT jacks (1 to 8): 105 dB (typ.)
Cross Talk@ 1 kHz	CONSOLE INPUT jacks (1 to 4): -80dB (Pad: ON, Input sens: +4 dBu, typ.) CONSOLE INPUT jacks (5 to 12): -80dB (Input sens: +4 dBu, typ.) CONSOLE OUTPUT jacks (1 to 8): -100 dB (typ.) * Sampling frequency is 48 kHz or 44.1 kHz.
Nominal Input Level (Variable)	CONSOLE INPUT jacks (1 to 4): -65 to -10 dBu (Pad: OFF) or -45 to +10 dBu(Pad: ON) CONSOLE INPUT jacks (5 to 12): -28 to +4 dBu
Input Impedance	CONSOLE INPUT jacks (1 to 4): 14 k ohms CONSOLE INPUT jacks (5 to 12): 10 k ohms
Non Clip Maximum Input level	CONSOLE INPUT jacks (1 to 4): +8 dBu (Pad: OFF) or +28 dBu (Pad: ON) CONSOLE INPUT jacks (5 to 12): +22 dBu
Nominal Output Level	CONSOLE OUTPUT jacks (1 to 8): +4 dBu (Load impedance: 10 k ohms)
Output Impedance	CONSOLE OUTPUT jacks (1 to 8): 600 ohms PHONES jack: 100 ohms
Recommended Load Impedance	CONSOLE OUTPUT jacks (1 to 8): 10 k ohms or greater PHONES jack: 8 ohms or greater
Non Clip Maximum Output level	CONSOLE OUTPUT jacks (1 to 8): +22 dBu (1 kHz, 10 k ohms load) PHONES jack: 150 mW + 150 mW (Typ., 1 kHz, 40 ohms load)
Residual Noise Level (IHF-A, typ.)	-88 dBu (All faders: Min)
Equivalent Input Noise Level (E.I.N.)	-126 dBu (Main Fader: Unity, Channel faders: Unity only one channel, Preamp gain: Max)

OTHERS

Display	800 x 480 dots Wide VGA TFT color screen with backlight
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	50 W
Dimensions	470.0 (W) x 482.7 (D) x 194.9 (H) mm 18-1/2(W) x 19(D) x 7-1/4(H) inches
Weight	9.8 kg 21 lbs 10 oz

(0dBu=0.775Vrms)

* XLR type: 1 GND, 2 HOT, 3: COLD
* phantom power: DC+48V(unloaded maximum), 14mA(maximum load) (All XLR type inputs)
* When a REAC Splitter S-4000D or a switching hub is used in-line with REAC cables, the network latency will increase by the amount of processing delay introduced by the splitting device itself. The actual delay is dependant upon the specifications of the splitting device, though the maximum delay amount for a single splitting device should be about 200microseconds.

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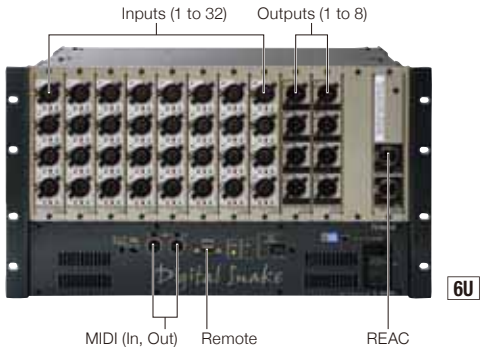
Digital Snake S-4000 series

S-4000S-3208 | 32 x 8 Modular Stage Unit **S-4000S-0832** | 8 x 32 Modular Stage Unit

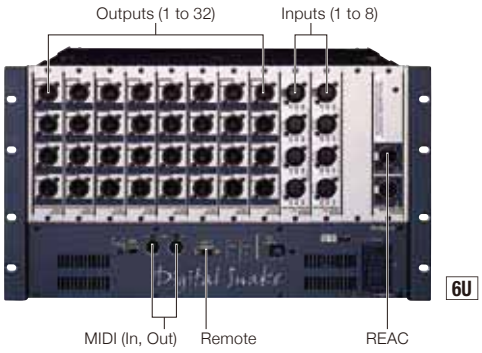
S-4000H | 8 x 32 FOH Unit **S-4000R** | Remote Controller

Simple and flexible digital snake units provide superb sound quality

S-4000S-3208 Front Panel

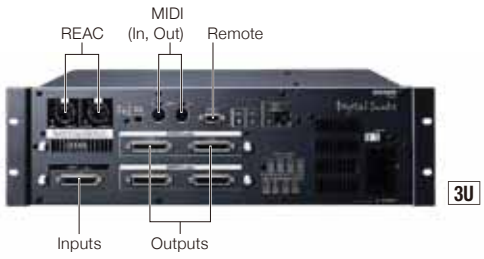


S-4000S-0832 Front Panel



S-4000S-3208/0832 Rear Panel

S-4000H Front Panel



S-4000H Rear Panel

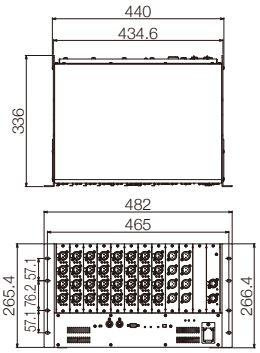
S-4000R Top Panel

S-4000R Rear Panel

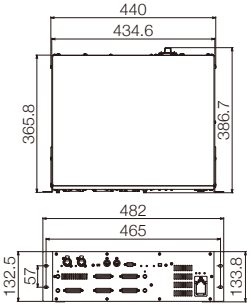
- **Superb quality pre-amps on each input channel**
- **S-4000S-3208/S-4000S-0832 can be used as I/O units of a V-Mixer for full digital mixing system**
- **S-4000S-3208 with S-4000H or S-4000S-0832 enables configuration of an individual digital transfer system**
- **Two REAC ports (one primary, one redundant) provide system reliability**
- **RS-232C interface for S-4000R Remote Controller or computer control**
- **MUTE ALL OUTPUTS button for noise-free connection of audio sources**
- **Connection port for optional redundant power supply (S-240P)**
- **S-4000R provides easy remote control of all input gain adjustments, phantom power and PAD settings**

NSCA 2006
Mix Magazine
Certified Hit Award

S-4000S-3208/0832 Dimensions

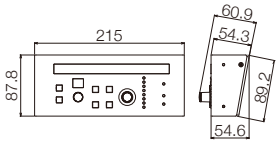


S-4000H Dimensions



Unit: mm

S-4000R Dimensions

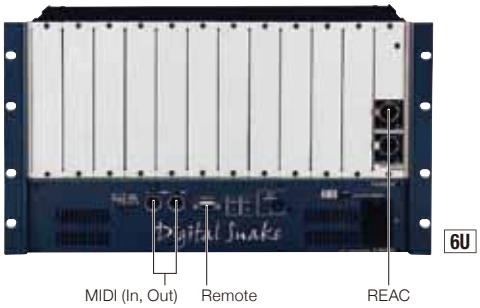


S-4000S-MR | Digital Snake Modular Rack Chassis **SI-AD4** | 4-channel Analog Input Module **SO-DA4** | 4-channel Analog Output Module

SI-AES4 | 4-channel Digital Input Module **SO-AES4** | 4-channel Digital Output Module **S-240P** | External Power Supply Unit

High quality options provide system flexibility

S-4000S-MR Front Panel

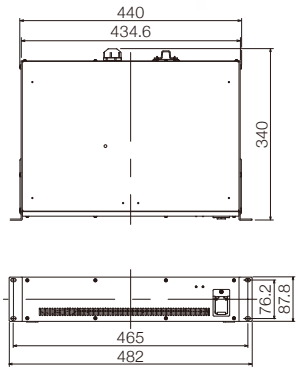


S-4000S-MR Rear Panel

S-240P Front Panel

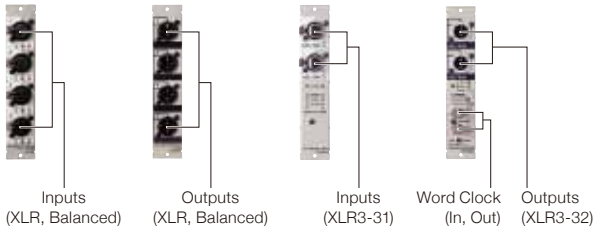
S-240P Rear Panel

S-240P Dimension



Unit: mm

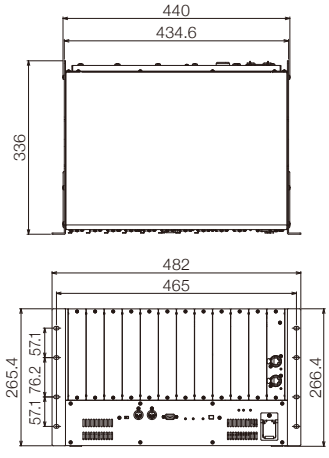
SI-AD4 SO-DA4 SI-AES4 SO-AES4



- **S-4000S-MR is modular rack chassis with no pre-installed In/Out modules; Designed for custom configurations such as 24x16 and 40x0**
- **SI-AD4 - 4-Channel Analog Input Module provides high quality pre-amps on each input channel with phantom power**
- **SO-DA4 - 4-Channel Analog Output Module provides high quality D/A converter**
- **SI-AES4 - 4-Channel Digital Input Module allows input of up to 96 kHz AES/EBU signal using the built-in sampling rate converter**
  * No support for double wire
- **SO-AES4 - 4-Channel Digital Output Module allows output of up to 96 kHz AES/EBU signal using the built-in sampling rate converter, and also supports synchronization with an external word clock**
  * No support for double wire
- **S-240P supplies redundant DC power to an S-4000S or S-4000H; Outputs DC 24 V 6 A power**

* S-4000S-MR can be customized in blocks of 8 channels when combined with the modules from the SI/SO series, which have both analog and digital I/O. Audio transmission and power supply redundancy is possible.

S-4000S-MR Dimension



Unit: mm

Digital Snake S-4000 series

SPECIFICATIONS S-4000S-3208

Number of Channels	32 inputs/8 outputs
AD/DA Conversion	24-bit/44.1 kHz, 48 kHz, 96 kHz
Frequency Response	-2 dB/+0 dB (@ +4 dBu, 20 Hz to 20 kHz)
Total Harmonic Distortion + Noise	0.05 % or less (Pad: On, Input Gain: +4 dBu, 22 to 20 kHz)
Dynamic Range	110 dB
Cross Talk	-80 dB
Nominal Input Level	-65 to -10 dBu (PAD: Off), -45 to +10 dBu (PAD: On) (1 dB step, Max. +28 dBu)
PAD	20 dB On/Off
Input Impedance	20 k-ohms
Nominal Output Level	+4 dBu (Max. +22 dBu)
Output Impedance	150-ohms
Recommended Load Impedance	10 k-ohms or greater
Residual Noise Level (IHF-A, typ.)	-90 dBu
Equivalent Input Noise Level (E.I.N.)	-128 dB
Network Latency	375 microseconds when using REAC cable only (AD - REAC - DA Latency: about 1.2 ms)
Memory	10
Connectors	**Input**: 32 (XLR type, balanced, phantom power, 4 ch input module x 8), **Output**: 8 (XLR type, balanced, 4 ch output module x 2), **REAC**: MAIN, BACKUP (RJ-45 EtherCon type), **Remote Connector**: 1 (RS-232C, DB-9 type), **MIDI Connectors**: IN, OUT (5-pin DIN type)
AC Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	130 W
Phantom Power	+48 V/14 mA (each input on SI-AD4, remote controlled)
Dimensions	482 (W) x 336 (D) x 266 (H) mm 19 (W) x 13-1/4 (D) x 10-1/2 (H) inches
Weight	17.0 kg, 37 lbs. 8 oz.

SPECIFICATIONS S-4000S-0832

Number of Channels	8 inputs/32 outputs
AD/DA Conversion	24-bit/44.1 kHz, 48 kHz, 96 kHz
Frequency Response	-2 dB/+0 dB (@ +4 dBu, 20 Hz to 20 kHz)
Total Harmonic Distortion + Noise	0.05 % or less (Pad: On, Input Gain: +4 dBu, 22 to 20 kHz)
Dynamic Range	110 dB
Cross Talk	-80 dB
Nominal Input Level	-65 to -10 dBu (PAD: Off), -45 to +10 dBu (PAD: On) (1 dB step, Max. +28 dBu)
PAD	20 dB On/Off
Input Impedance	20 k-ohms
Nominal Output Level	+4 dBu (Max. +22 dBu)
Output Impedance	150-ohms
Recommended Load Impedance	10 k-ohms or greater
Residual Noise Level (IHF-A, typ.)	-90 dBu
Equivalent Input Noise Level (E.I.N.)	-128 dB
Network Latency	375 microseconds when using REAC cable only (AD - REAC - DA Latency: about 1.2 ms)
Memory	10
Connectors	**Input**: 8 (XLR type, balanced, phantom power, 4 ch input module x 2), **Output**: 32 (XLR type, balanced, 4 ch output module x 8), **REAC**: MAIN, BACKUP (RJ-45 EtherCon type), **Remote Connector**: 1 (RS-232C, DB-9 type), **MIDI Connectors**: IN, OUT (5-pin DIN type)
AC Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	130 W
Phantom Power	+48 V/14 mA (each input on SI-AD4, remote controlled)
Dimensions	482 (W) x 336 (D) x 266 (H) mm 19 (W) x 13-1/4 (D) x 10-1/2 (H) inches
Weight	17.0 kg, 37 lbs. 8 oz.

SPECIFICATIONS S-4000H

Number of Channels	8 inputs/32 outputs
AD/DA Conversion	24-bit/96.0 kHz
Frequency Response	-2 dB/+0 dB (@ +4 dBu, 20 Hz to 20 kHz)
Total Harmonic Distortion + Noise	0.05 % or less (Input Gain: +4 dBu, 22 to 20 kHz)
Dynamic Range	110 dB
Cross Talk	-80 dB
Nominal Input Level	+4 dBu (Max. +22 dBu)
Input Impedance	30 k-ohms
Nominal Output Level	+4 dBu (Max. +22 dBu)
Output Impedance	600-ohms
Recommended Load Impedance	10 k-ohms or greater
Residual Noise Level (IHF-A, typ.)	-90 dBu
Equivalent Input Noise Level (E.I.N.)	-128 dB
Network Latency	375 microseconds when using REAC cable only (AD - REAC - DA Latency: about 1.2 ms)
Memory	10
Connectors	**Input**: 1 (DB-25 type, balanced, 8-channels), **Output**: 4 (DB-25 type, balanced, 32-channels each), **REAC**: MAIN, BACKUP (RJ-45 EtherCon type), **Remote Connector**: 1 (RS-232C, DB-9 type), **MIDI Connectors**: IN, OUT (5-pin DIN type)
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	70 W
Dimensions	482 (W) x 387 (D) x 133 (H) mm 19 (W) x 15-1/4 (D) x 5-1/4 (H) inches
Weight	9.4 kg, 20 lbs. 12 oz.

SPECIFICATIONS S-4000R

Connector	**Remote Connector**: 1 (RS-232C, DB-9 type)
Power Supply	Supplied from connected device. (S-4000S, S-4000H; through the remote cable)
Dimensions	215 (W) x 87 (D) x 55 (H) mm 8-1/2 (W) x 3-7/16 (D) x 2-3/16 (H) inches
Weight	0.8 kg, 1 lbs. 13 oz.

SPECIFICATIONS S-4000S-MR

Connectors	**REAC**: MAIN, BACKUP (RJ-45 EtherCon type), **Remote Connector**: 1 (RS-232C, DB-9 type), **MIDI Connectors**: IN, OUT (5-pin DIN type)
Network Latency	375 microseconds when using REAC cable only (AD - REAC - DA Latency: about 1.2 ms)
Memory	10
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	130 W
Dimensions	482 (W) x 336 (D) x 266 (H) mm 19 (W) x 13-1/4 (D) x 10-1/2 (H) inches

SPECIFICATIONS SI-AD4

Number of Channels	4 inputs
AD Conversion	24-bit/44.1 kHz, 48 kHz, 96 kHz
Nominal Input Level	-65 to -10 dBu (PAD: Off), -45 to +10 dBu (PAD: On) (1 dB step, Max. +28 dBu)
PAD	20 dB On/Off

Input Impedance	20 k-ohms
Phantom Power	+48 V/14 mA
Connectors	XLR type x 4, balanced
Indicator	Phantom, Clip, Signal

SPECIFICATIONS SO-DA4

Number of Channels	4 outputs
DA Conversion	24-bit/44.1 kHz, 48 kHz, 96 kHz
Nominal Output Level	+4 dBu (Max. +22 dBu)

Output Impedance	150-ohms
Recommended Load Impedance	10 k-ohms or greater
Connectors	XLR type x 4, balanced

SPECIFICATIONS SI-AES4

Number of Channels	4 inputs (All with sampling rate conversion)
Format	AES/EBU (Professional Use), IEC60958-4 (Professional Use) * Not support for double wire
Bit Rate	24-bit

Connector	XLR3-31 type x 2
Indicator	LOCK, Sampling Rate (96 kHz, 48 kHz, 44.1 kHz, OTHER) * When 88.2 kHz is inputted, OTHER and 44.1 kHz will indicate

SPECIFICATIONS SO-AES4

Number of Channels	4 inputs (All with sampling rate conversion)
Format	AES/EBU (Professional Use), IEC60958-4 (Professional Use) * Not support for double wire
Bit Rate	24-bit

Connector	XLR3-32 type x 2 WORD CLOCK IN/OUT (BNC)
Indicator	Clock Source (IN, EXT, SRC), LOCK (Word clock), Sampling Rate (96 kHz, 48 kHz, 44.1 kHz)

SPECIFICATIONS S-240P

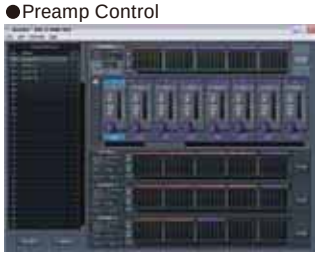
Power Output	+24V/6A DC
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	180 W

Dimensions	482 (W) x 340 (D) x 89 (H) mm 19 (W) x 13-7/16 (D) x 3-9/16 (H) inches
Weight	5.4 kg, 11 lbs 15 oz.

S-4000RCS Remote Control Software

Remote control software for the S-4000S/S-1608/S-0816/S-0808 providing the same functionality as the S-4000R. It also enables control of the M-48 Personal Mixer and the S-4000M REAC Merge Unit. Free download available from the Roland Systems Group website. www.rolandsystemsgroup.net

●Preamp Control

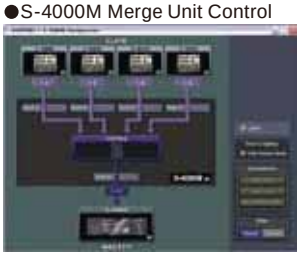


Preamp Gain, Phantom Power, PAD are controllable from the S-4000RCS software. Also preamp gain setups can be saved and recalled.

●Personal Mixing Management & Control

Enable setup and manage the M-48 parameters on PC.

●S-4000M Merge Unit Control



Configures routing, input preamp gain, PAD and phantom power.

Option

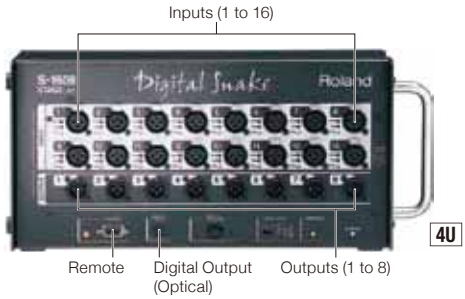
SC-A41S | D-SUB/XLR Cable Set

SC-A41S multi-cables are convenient for connection to the S-4000H, analog consoles, and other equipment. The SC-A0805DF has eight female XLR connectors and a 25-pin D-Sub connector. The SC-A0805DM has eight male XLR connectors and a 25-pin D-Sub connector. Each cable is 4.5 meters long.

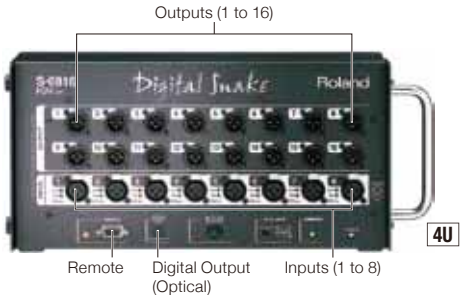
S-1608 | Stage Unit S-0816 | FOH Unit

Compact and portable, 16x8 Digital Snake offers many flexible configurations for any installation

S-1608 Front Panel

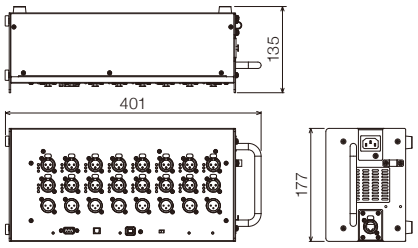


S-0816 Front Panel



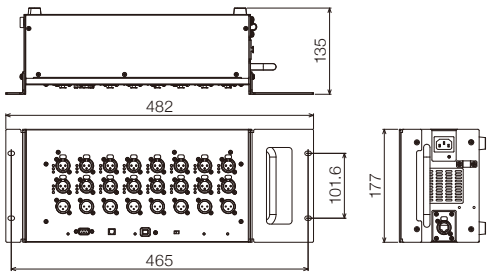
- **16 x 8 Ch high quality 24-bit/96 kHz digital audio transmission via Cat5e cable**
- **Compact, floor-based or rack-mountable design**
- **REAC low latency digital audio transmission system**
- **Connect as I/O unit of V-Mixer for full digital mixing system**
- **Remote controllable preamps using an S-4000R or free downloadable RCS software for PC**
- **Easy and affordable splits and recording options**

S-1608/S-0816 dimension



Unit: mm

S-1608/S-0816 with rack mount bracket dimension



Unit: mm

NAB2007
Radio World -
"Cool Stuff" Award

SPECIFICATIONS S-1608/S-0816

Number of Channels	S-1608: 16 inputs/8 Outputs S-0816: 8 Inputs/16 Outputs
AD/DA Conversion	24-bit/44.1 kHz, 48 kHz, 96 kHz
Frequency Response	-2 dB/+0 dB (@ +4 dBu, 20 Hz to 20 kHz)
Total Harmonic Distortion + Noise	0.05 % or less (PAD: On, Input Gain: +4 dBu, 22 Hz to 20 kHz)
Dynamic Range	110 dB
Cross Talk	-80 dB or less (Input Gain: +4 dBu, typ.)
Nominal Input Level	-65 to -10 dBu (PAD: Off), -45 to +10 dBu (PAD: On) (1 dB step, Max. +28 dBu)
PAD	20 dB On/Off
Input Impedance	14 k-ohms
Nominal Output Level	+4 dBu (Max. +22 dBu)
Output Impedance	600-ohms
Recommended Load Impedance	10 k-ohms or greater
Residual Noise Level (IHF-A, typ.)	-80 dBu or less
Equivalent Input Noise Level	-128 dB
Network Latency	375 microseconds when using REAC cable only (AD - REAC - DA Latency: approx 1.2 ms)

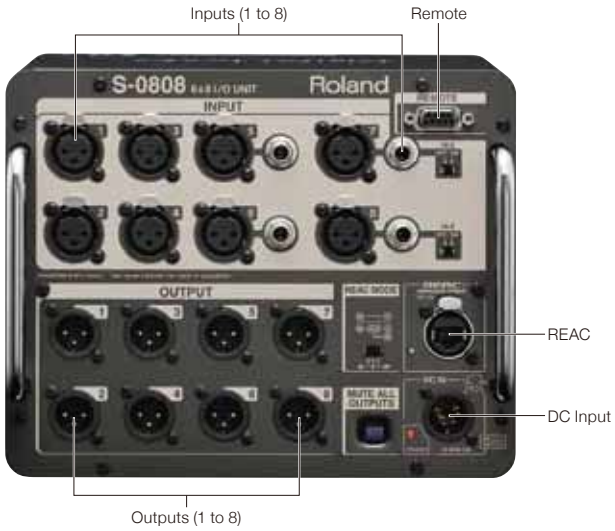
S-1608 Connectors	**Input**: 16 (XLR type, balanced, phantom power), **Output**: 8 (XLR type, balanced), **Digital Output connector**: 1 (Optical type), **REAC Connector**: 1 (RJ-45 EtherCon type), **Remote Connector**: 1 (RS-232C, DB-9 type)
S-0816 Connectors	**Inputs**: 8 (XLR type, balanced, phantom power), **Outputs**: 16(XLR type, balanced), **Digital Output connector**: 1 (Optical type), **REAC Connector**: 1 (RJ-45 EtherCon type), **Remote Connector**: 1 (RS-232C, DB-9 type)
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	45 W
Phantom Power	+48 V (each input, remote controlled)
Dimensions	401.0 (W) x 135.0 (D) x 177.0 (H) mm 15-13/16 (W) x 5-3/8 (D) x 7 (H) inches
Weight	5.5 kg, 12 lbs. 3 oz. (Including rack mount bracket)

* When a REAC Splitter S-4000-SP or a switching hub is used in-line with REAC cables, the network latency will increase by the amount of processing delay introduced by the splitting device itself. The actual delay is dependant upon the specifications of the splitting device, though the maximum delay amount for a single splitting device should be about 200 microseconds.

Roland

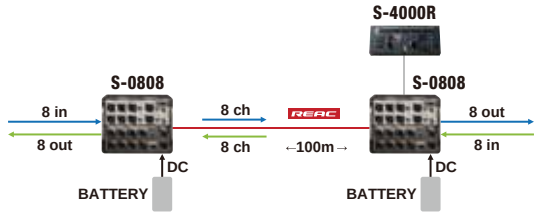
S-0808 | 8 x 8 I/O Unit

Enjoy flexibility in setup using external battery operation or power supplied over REAC

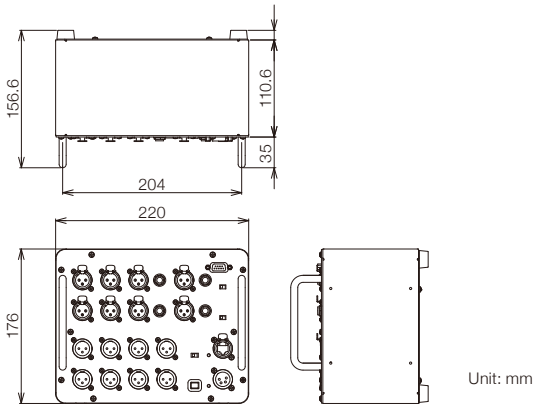


- **Compact and light weight 8 input/8 output Digital Snake**
- **High quality, fully discreet preamp**
- **Eliminate the need for direct boxes by using the TRS or Hi-Z inputs**
- **Power options – REAC Embedded Power and External Battery enabling a variety of setups**
- **Preamp gain, PAD and Phantom Power can be controlled by S-4000R, S-4000RCS software and V-Mixer M-400/M-380**

Battery-Powered 8 x 8 Snake



An 8 input, 8 output simple digital snake system – ideal when AC power is not convenient or available.



SPECIFICATIONS S-0808

Number of Channels	8 inputs/8 outputs
AD/DA Conversion	24-bit/44.1 kHz, 48 kHz, 96 kHz
Frequency Response	-2 dB/+0 dB (@ +4 dBu, 20 Hz to 20 kHz)
Total Harmonic Distortion + Noise	0.04 % or less (PAD: On, Input Gain: +4 dBu, 22 Hz to 20 kHz)
Dynamic Range	110 dB
Cross Talk	-80 dB or less (Input Gain: +4dBu, typ.)
Nominal Input Level	-65 to -10 dBu (PAD: Off), -45 to +10 dBu (PAD: On) (1 dB step, Max.+28 dBu)
PAD	20 dB On/Off
Input Impedance	7 k-ohms
Nominal Output Level	+4 dBu (Max.+22 dBu)
Output Impedance	600-ohms
Recommended Load Impedance	10k-ohms or greater
Residual Noise Level (IHF-A, typ.)	-80 dBu or less
Equivalent Input Noise Level	-128 dB
Network Latency	375 microseconds when using REAC cable only (AD - REAC - DA Latency: approx 1.2 ms)

Connectors	Input 1 to 8 (XLR type, balanced, phantom power), Input 5 to 8 (TRS Phone type, balanced) Output 1 to 8 (XLR type, balanced), REAC Embedded Power x 1 (RJ-45 EtherCon type), Remote Connector x 1 (RS-232C, DB-9 type) DC Input x 1 (XLR 4-pin type, Supports DC 12 to 18 V)
Power Supply	External Battery (DC 12 to 18 V) or REAC Embedded Power
Power Consumption	26 W (DC 12 V)
Phantom Power	+48 V/Max. 14mA (each input, remote controlled)
Dimensions	220 (W) x 176 (D) x 156.6 (H) mm 8-11/16 (W) x 6-15/16 (D) x 6-3/16 (H) inches
Weight	2.9 kg, 6 lbs. 7 oz.

* TRS takes priority if XLR and TRS are simultaneously input to INPUT 5 to 8.
* TRS of INPUT 7/8 turns to unbalanced when Hi-Z is turn on.

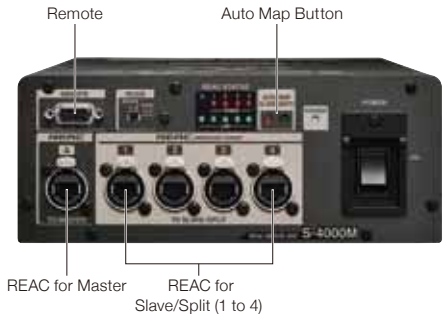
* When a REAC Splitter S-4000-SP or a switching hub is used in-line with REAC cables, the network latency will increase by the amount of processing delay introduced by the splitting device itself. The actual delay is dependant upon the specifications of the splitting device, though the maximum delay amount for a single splitting device should be about 200 microseconds

DIGITAL SNAKES

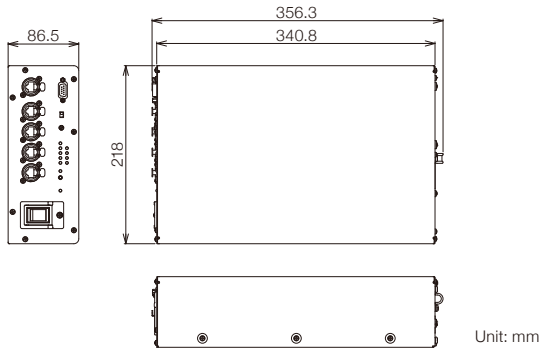
Roland

S-4000M | REAC Merge Unit

Enables new distributed input/output possibilities by merging up to four REAC devices



- **Merge up to 4 REAC devices into a single REAC stream**
- **Power REAC devices supporting embedded power**
- **Automatically assign input channels using the Auto Map function**
- **Patch input and output assignments using S-4000RCS software or the V-Mixer**



Unit: mm

SPECIFICATIONS S-4000M

Connectors	**REAC**: 1 (RJ-45 EtherCon type) **REAC Embedded Power**: 4 (RJ-45 EtherCon type) **Remote**: 1 (RS-232C, 9-pin D-Sub type)
Indicators	**REAC Embedded Power**: Red x 4, **REAC LINK**: Green x 5, **POWER**: Blue x 1, **AUTO MAP SLAVE UNITS**: Red x 1
Switches	POWER x 1, MODE x 1, AUTO MAP SLAVE UNITS x 1
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Current Drew	1.6 A/AC 115 V, 117V 0.9A/AC 220 V, 230V, 240V (At max output of REAC Embedded Power)
Dimensions	218.0 (W) x 356.3 (D) x 86.5 (H) mm 8-5/8 (W) x 14-1/16 (D) x 3-7/16 (H) inches
Weight	3.0 kg, 6 lbs. 10 oz.

DIGITAL SNAKES

Roland

S-4000-SP | REAC Splitter

Enables splitting and extension of REAC signals

- **Dual 5-port dedicated splitter**
- **Provides highest possible reliability using Neutrik® EtherCon connectors and a dual independent power supply**

SPECIFICATIONS S-4000-SP

Connectors	**Main REAC**: 5 (RJ-45, EtherCon type) **Backup REAC**: 5 (RJ-45, EtherCon type)
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	13 W
Dimensions	482 (W) x 225 (D) x 44 (H) mm 19 (W) x 8-7/8 (D) x 1-3/4 (H) inches
Weight	2.8 kg, 6 lbs. 3 oz.
EMI	FCC Part 15 Class A, EN55022 Class A

DIGITAL SNAKES

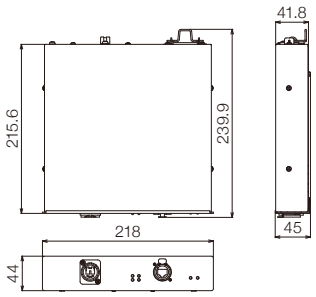
Roland

S-OPT | REAC Optical Converter

Enjoy long distance REAC audio transfer

- **Converts multi-channel REAC signal to a digital optical signal**
- **Up to 2 km distance transfer**
- **Rugged, Neutrik® OpticalCon connectors provide highest possible system reliability**

* Use Neutrik's Mobile Fiber Cable for optical single transfer.



Unit: mm

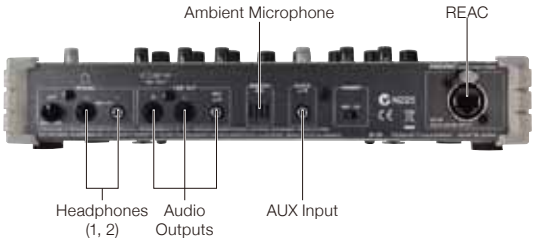
SPECIFICATIONS S-OPT

Connectors	**Optical**: 1 (Dual LC, OpticalCon type) **REAC**: 1 (RJ-45, EtherCon type) **Power Link**: 1 (Mini-DIN 8-pin type)
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	10 W
Dimensions	218 (W) x 240 (D) x 46 (H) mm 8-5/8 (W) x 9-1/2 (D) x 1-7/8 (H) inches
Weight	1.3 kg, 2 lbs. 14 oz.
EMI	FCC Part 15 Class A, EN55022 Class A

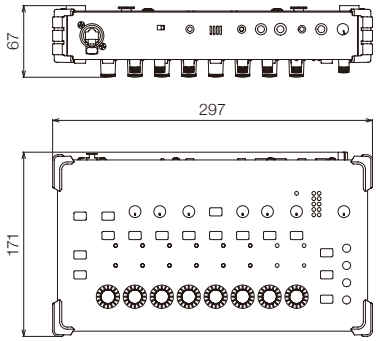
Roland

M-48 | Live Personal Mixer

The “next generation” live personal mixer offers musicians the flexibly to control exactly what they want to listen to during their performances

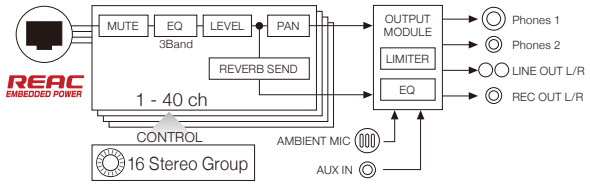


- **Enables control of up to 40 audio channels via 16 stereo groups**
- **Provides the highest level of sound monitoring quality for both headphones and IEMs (In-ear Monitors) as well as for wedge and powered monitors**
- **Built-in ambient mic aids in communicating with other musicians as well as enabling a stage/room feel if desired**
- **REAC Embedded Power transfers both power and 40 channels of audio to the M-48 via a single Cat5/6 cable**
- **Volume, Pan, 3-band EQ and built-in Reverb per group – all instantly adjustable by convenient encoder knobs**



Unit: mm

Block Diagram

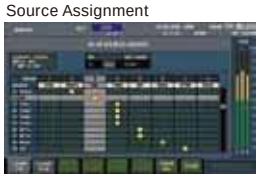


M-48 Setup

●A Complete Digital Mixing System with the V-Mixer
The V-Mixer is equipped with all the remote management software, memory recall, providing a simple and flexible setup.

Setup Display

Source Assignment



●Connect to an existing Analog/Digital Console
Connect M-48 to your existing console using a Digital Snake front-end or the S-MADI for MADI capable digital consoles.

Setup and manage the M-48 on PC using the S-4000RCS Remote Control Software when using with an existing console.

SPECIFICATIONS M-48

Number of Input Channels	43 (40 in, STEREO AUX in, 1 AMBIENT MIC in)
Number of Output Channels	4 (STEREO LINE out, STEREO PHONES out)
AD/DA Conversion	24-bit/96.0 kHz, 48.0 kHz, 44.1 kHz
Nominal Input Level	AUX IN L/R: -16 dBu (at max volume)
Input Impedance	AUX IN L/R: 10 k-ohms
Non Clip Maximum Input level	AUX IN L/R: +2 dBu
Nominal Output Level	LINE OUT L/R: -6 dBu (LINE OUT Vol: Unity, Load impedance: 10 k-ohms), LINE OUT REC L/R: -12 dBu (LINE OUT Vol: Unity, Load impedance: 10 k-ohms)
Output Impedance	PHONES jacks (1, 2): 10 ohms LINE OUT L/R jacks: 600 ohms LINE OUT REC L/R jack: 1 k ohms
Recommended Load Impedance	PHONES jacks (1, 2): 16-ohms or greater (Composition impedance of 1 and 2), LINE OUT L/R jacks: 10 k-ohms or greater, LINE OUT REC L/R jack: 10 k-ohms or greater

Non Clip Maximum Output level	PHONES jacks (1, 2): 250 mW + 250 mW (1 or 2, 1 kHz, 40-ohms load), LINE OUT L/R jacks: +12 dBu (1 kHz, 10 k-ohms load), LINE OUT REC L/R jack: +6 dBu (1 kHz, 10 k-ohms load)
Connectors	REAC port: RJ-45 EtherCon type AUX IN L/R jack: Stereo miniature phone type LINE OUT L/R jacks: 1/4-inch TRS phone type LINE OUT REC L/R jack: Stereo miniature phone type PHONES jacks: Stereo miniature phone type and Stereo 1/4-inch phone type
Power Supply	REAC Embedded Power (S-4000D or S-4000M is needed for supplying power)
Power Consumption	13 W
Dimensions	297 (W) x 171 (D) x 67 (H) mm 11-3/4 (W) x 6-3/4 (D) x 2-11/16 (H) inches
Weight	1.5 kg, 3 lbs. 5

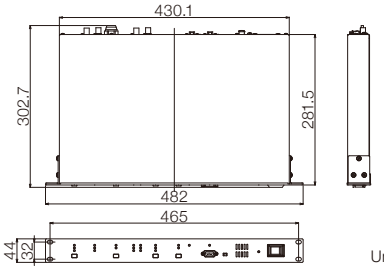
S-MADI | REAC MADI Bridge

Expand audio system possibilities with REAC and MADI

NEW

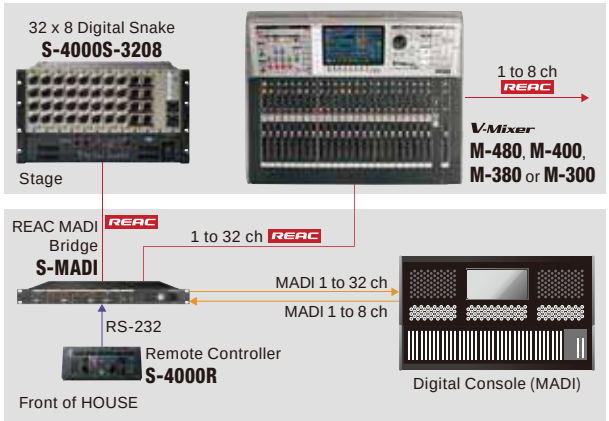
1U

- Bi-directional format conversion between REAC and MADI
- BNC and Optical MADI ports
- Supports REAC Embedded Power and Split out for connecting and power additional devices (e.g., M-48 Personal Mixer, S-0808)
- Support for 44.1/48kHz
- Preamp and personal mixing control with S-4000RCS (Remote Control Software)
- Clock source can be selected from REAC, MADI or Word Clock

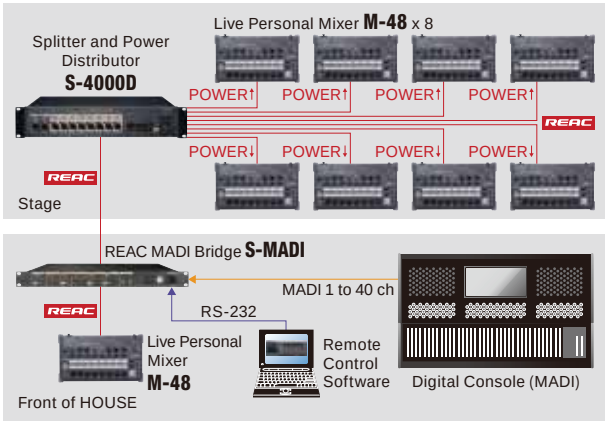


Unit: mm

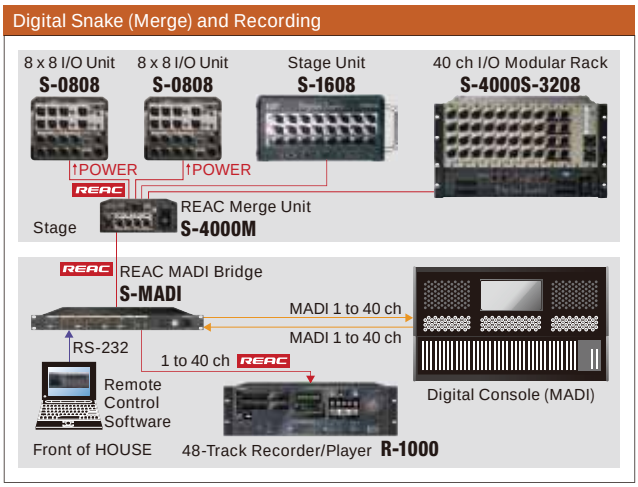
Digital Snake with Monitor Position



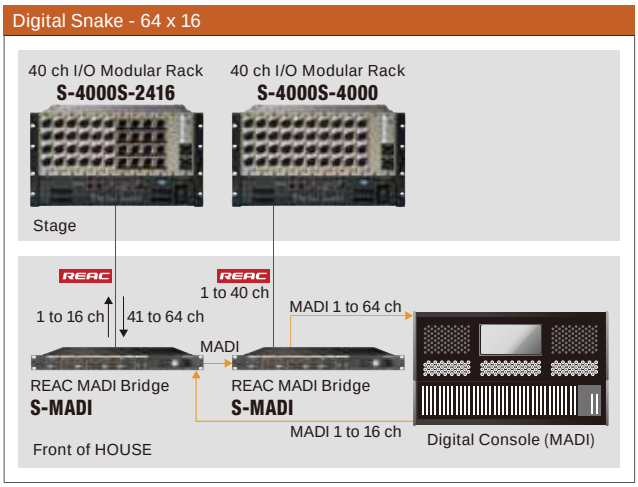
Personal Mixing



Digital Snake (Merge) and Recording



Digital Snake - 64 x 16



SPECIFICATIONS S-MADI

Sampling Frequency	48 kHz/44.1 kHz
MADI Channel Mode	64 Ch/56 Ch
Connectors	**Front Panel:** REMOTE (D-sub 9-pin type, RS-232C) **Rear Panel:** REAC MAIN (RJ-45 EtherCon type), REAC SPLIT OUT (REAC EMBEDDED POWER, RJ-45 EtherCon type), WORD CLOCK IN (BNC type), WORD CLOCK OUT (BNC type), Coaxial MADI IN (BNC type), Coaxial MADI OUT (BNC type), Optical MADI IN/OUT (SC duplex type)

Power Supply	AC 115 V, AC 117 V, AC 220 V, AC 230 V, AC 240 V (50/60 Hz)
Current Drew	0.7 A (REAC Embedded Power: Maximum)
Dimensions	482.0 (W) x 302.7 (D) x 44.0 (H) mm 19 (W) x 11-15/16 (D) x 1-3/4 (H) inches
Weight	3.5 kg/7 lbs 12 oz

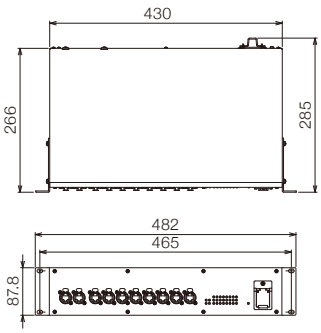
PERSONAL MIXERS

Roland

S-4000D | REAC Splitter and Power Distributor

A REAC Splitter that supplies audio and embedded power to M-48 Live Personal Mixer or S-0808 Digital Snake

- **Equipped with 10 REAC ports including 8 ports of REAC Embedded Power**
- **Automatic detection of a REAC products. Power is not supplied if the device is not compatible with REAC Embedded Power**



Unit: mm

SPECIFICATIONS **S-4000D**

Connectors	REAC port: 2 (RJ-45 EtherCon type) REAC Embedded Power port: 8 (RJ-45 EtherCon type)
Power Supply	AC 115 V, 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Dimensions	482 (W) x 285 (D) x 88 (H) mm 19 (W) x 11-1/4 (D) x 3-1/2 (H) inches
Weight	4.2 kg, 9 lbs. 5 oz.

PERSONAL MIXERS

Roland

RH-PM5 | In-ear Monitors

Tuned and designed for stage and studio performance

- **High quality and detailed sound articulation for the best possible on-stage and studio monitoring**
- **Heavy duty aluminum construction to handle the rigors of stage usage**
- **4 different types of ear adapters (S/M/L/XL) along with carrying case**

PERSONAL MIXERS

Roland

SC-W20F | REAC Cable

20 meter Premium Cat5e Cable for REAC signal transmission

- **Crossover Ethernet cable with Neutrik® Ethercon connectors on both ends**

PERSONAL MIXERS

Roland

SC-W100S | REAC Cable

100 meter Cat5e Cable for REAC signal transmission

- **Crossover Ethernet cable with Neutrik® Ethercon connectors on both ends**

PERSONAL MIXERS

Roland

W100S-R | REAC Cable

100 meter Cat5e Cable for REAC signal transmission on reel

- **Crossover Ethernet cable with Neutrik® Ethercon connectors on both ends**
- **Compact and lightweight cable reel with SC-W100S cable pre-rolled**

Roland

R-1000 | 48-Track Recorder/Player

Efficient solution for live recording/playback and sound check

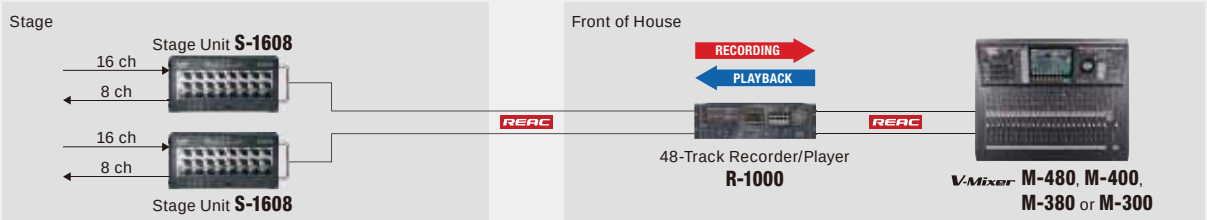
Preliminary **Available in Summer 2011**

- **Recording/playback of up to 48 Channels**
- **HDD and SSD media supported**
- **Records with Broadcast Wave Format (BWF)**
- **Color LCD with touch control**
- **Dedicated recorder and player with easy and intuitive operation**
- **Integrate with a V-Mixing System for virtual sound checks**

System Example

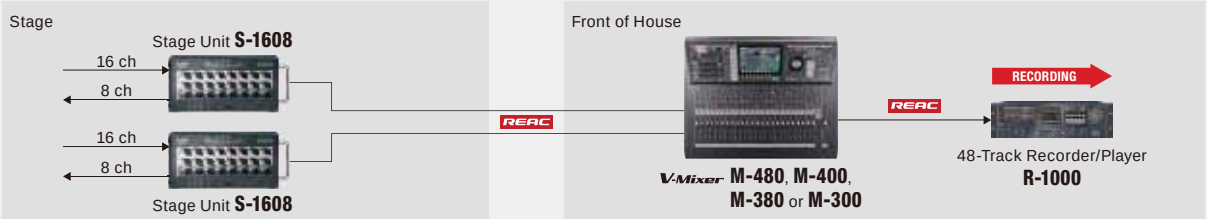
The R-1000 not only records multi-channel audio but can also play back 48 channels in combination with a V-Mixing System. This enables playing backing track and rehearsing/training without the band present. This efficient recording solution expands the REAC world and can also be used with other live digital mixing systems when used in combination with the S-MADI REAC to MADI Bridge.

Live Recording/Sound Check

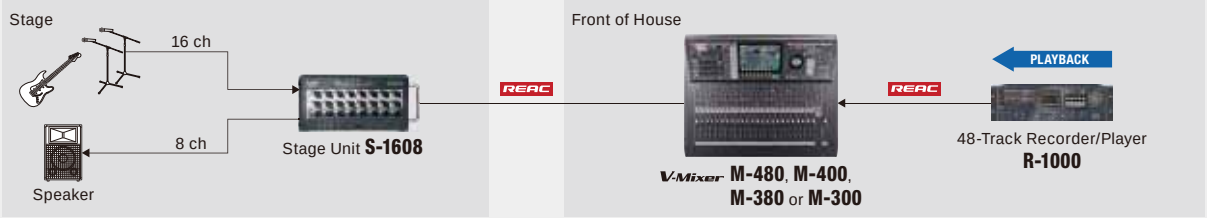


* Recording and Playback can not be done simultaneously.

Live Recording



Backing Track Playback



Live Recording with MADI Capable Console

V-STUDIO 700

Ultimate recording and editing solution for use with REAC systems

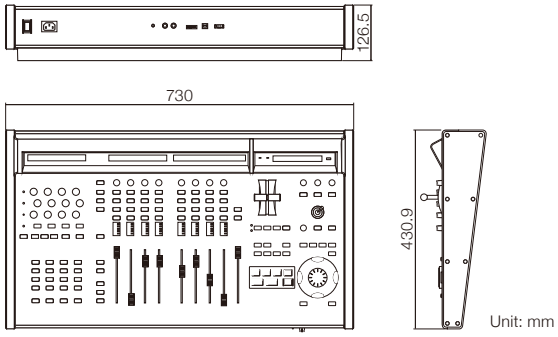
VS-700C

- The VS-700C V-STUDIO Console offers broader ranging control and deeper editing and mixing functionality for SONAR than any control surface on the market today

VS-700R

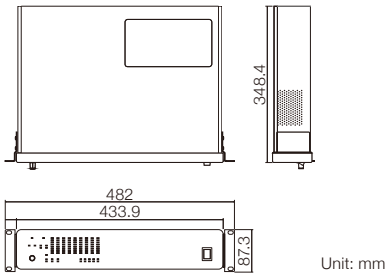
- VS-700R V-STUDIO I/O High-speed USB 2.0 audio interface that provides all the recording and routing capabilities needed to handle any music production task

VS-700C Dimension



Unit: mm

VS-700R Dimension



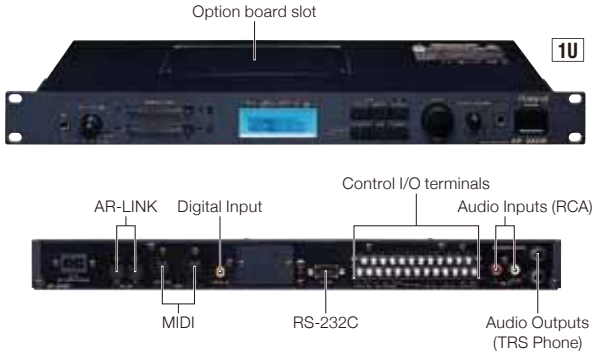
Unit: mm

SONAR REAC Recording System

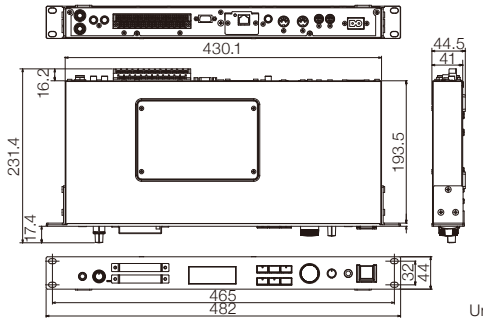
- One REAC cable enables 24-bit full digital multi-channel recording of up to 40 channels
- Simply plug a CAT5e cable into a computer installed with Cakewalk SONAR PRODUCER and capture live audio
- FA-66 FireWire audio interface is provided as a confidence monitoring device for use during the audio recording process
- The SONAR REAC Recording System includes:
  SONAR Producer
  REAC Technology Driver
  Hardware Monitoring Device (e.g., FA-66)
  SONAR Templates
  Users Guides

AR-3000R | Audio Recorder

The highest sound quality and most flexible control options on the market today



- **Industry standard for reliable audio playback with no moving parts**
- **High quality/long time audio playback and recording using RDAC technology**
- **Supports WAV file playback/recording**
- **Flexible system integration by using the various built-in external controls**
- **Link multiple units (up to 32 units) with sample accuracy**
- **Recording and Playback of MIDI data**
- **Compact flash card is used as storage media**



Unit: mm

Option

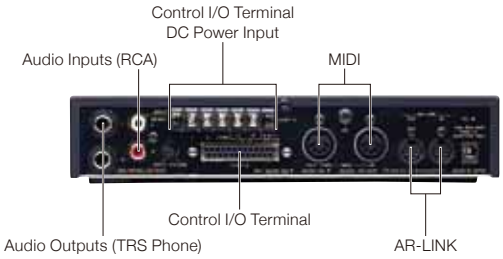
ARC-15 AR-LINK Cable (1.5m)
AR-NT1R Network Option for AR-3000R
ARE-3000 AR Card Editor *
* Free download available from **www.rolandsystemsgroup.net**

SPECIFICATIONS AR-3000R

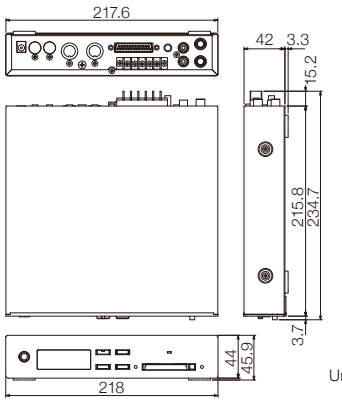
Recording Format	RDAC (Roland Digital Audio Coding) , WAV
Recording Media	Compact Flash Memory Card up to 2GB x 2
RDAC Mode	WAV, H-LINEAR, LINEAR, MODE3, MODE2, MODE1
Phrase Type	Stereo, Mono (Audio) or SMF (MIDI)
Number of Phrases	Up to 2,000 phrases
Audio Input	**Mic Input** : -40dBu/2k ohms/balanced **Line Input** : 0dBu/20k (stereo) or 10k (mono) ohms/unbalanced
Audio Output	**Line output** : +4dBu/500 ohms/balanced **Mono output** : +4dBu/500 ohms/unbalanced **Phone** : 90+90mW Max (30 ohms or more)
S/N Ratio	90dB
Interfaces	RS-232C, MIDI, AR-LINK
Power Supply	AC 117V, 230V, 240V (50/60Hz)
Power Consumption	11W (117V), 12W (230/240V)
Dimensions	482.0 (W) x 231.4 (D) x 44.0 (H) mm 19 (W) x 9-1/8 (D) x 1-3/4 (H) inches
Weight	2.7 kg 6 lbs

AR-200R | Audio Recorder

Industry standard sound quality in a compact size



- **Industry standard for reliable audio playback with no moving parts**
- **High quality/long time audio playback and recording using RDAC technology**
- **Supports WAV file playback**
- **DC 9 to 24V is also available as power**
- **Complete compatibility for playback with AR-3000R card setup**
- **Link multiple units (up to 32 units) using the AR-3000R**
- **Compact flash card is used as storage media**



Unit: mm

SPECIFICATIONS AR-200R

Recording Format	RDAC (Roland Digital Audio Coding)
Recording Media	Compact Flash Memory Card up to 2GB
RDAC Mode	WAV *, H-LINEAR *, LINEAR, MODE3, MODE2, MODE1 *Playback only
Phrase Type	Stereo, Mono (Audio) or SMF (MIDI)
Number of Phrases	Up to 1,000 phrases * *When saved on AR-3000R
Audio Input	0dBu/10k ohms/unbalanced
Audio Output	**Line output** : +4dBu/-10dBV/600 ohms/balanced **Phone** : 1+1 mW Max (30 ohms or more)
S/N Ratio	84 dB
Power Supply	AC Adaptor or DC9 -24V
Current Draw	1000mA (AC Adaptor) or 1200mA (External DC Power)
Options	Rack Mount bracket (RAD-50) AC Adaptor (ACI/PSB series)
Dimensions	218.0 (W) x 234.7 (D) x 44.0 (H) mm 8-5/8 (W) x 9-1/4(D) x 1-3/4 (H) inches
Weight	1.4 kg 3 lbs. 2 oz

VIDEO EQUIPMENT

Video Mixers/Switchers

Model	HD/SD-SDI	RGB/Component	DVI-D/HDMI	S-Video	Composite	External Control
V-1600HD	8 in/2 out	4 in/2 out	2 in /2 out	1 in/1 out	1 in/ 1out	RS-422, MIDI, Tally, Reference
V-440HD		4 in/2 out + 1 PVW		4 in/1 out	4 in/1 out + 1 PVW	RS-232C, MIDI, Tally
V-44SW		4 in/2 out + 1 PVW		4 in/0 out	4 in/0 out + 1Menu	RS-232C, MIDI
LVS-800		2 in/0 out		4 in/2 out	6 in/4 out + 2 PVW	RS-232C, MIDI, Tally
V-8		2 in (Switchable)		4 in/1 out	7 in/2 out + 2 PVW	MIDI
LVS-400				4 in/1 out	4 in/2 out + 1 PVW	MIDI
V-4				2 in/1 out	4 in/2 out + 1 PVW	MIDI

Multi-Viewer

Model	Composite	RGB	HDMI	Screen Layouts	Matrix Switcher	External Control
MVS-12	12 in/4 out + 1 PVW	0 in/1 out	0 in/1 out	12, 10, 9, 4	4 buses	RS-232C, MIDI, LAN, PS/2 Mouse

AV Mixer

Model	Composite/S-Video	RGB	HDMI	Audio	USB Video Streaming	External Control
VR-5	3 in/2 out + 1 PVW	1 in/0 out	0 in/1 out (SD)	12 in/4 out	●	MIDI

Video Players

Model	HD	SD	Video Editor	Scheduler	Visual Synthesizer	Input Channel
PR-1000HD	●	●		●		2 HDD (Removable)
PR-80		●	●	●		2 HDD (Internal/Removable)
PR-50		●		●		2 HDD (Internal/Removable)
P-10		●				SD card
CG-8		●			●	HDD (Internal)

Field Recorders

Model	HDV/DV	MPEG-2 TS	WAV	BWF	Audio	Time Code	Media
F-1	●	●	●	●	2 in/1 headphones out	iLink	HDD/SSD
R-4Pro			●	●	4 in/4 out	SMPTE	HDD
R-44			●	●	4 in/4 out		SD Card

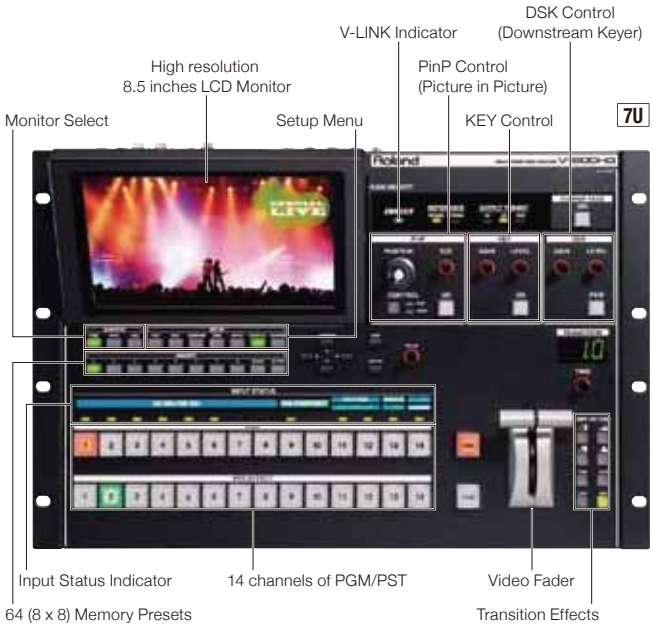
Video Converters

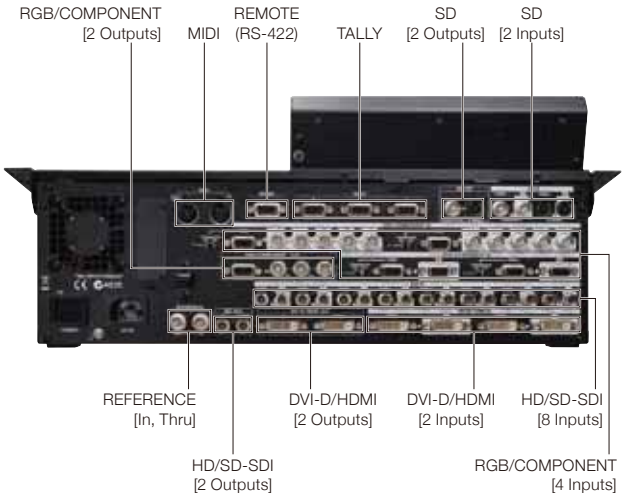
Model	HD/SD SDI	HD/SD Component	DVI	Composite/S-Video	IEEE1394	USB Video Streaming	Up/Down Convert
VC-50HD	In/Out		HDMI Output		HDV/DV/MPEG-2 TS		
VC-300HD	In/Out	In/Out	DVI-I		HDV/DV		●
VC-200HD		In/Out	DVI-I		HDV/DV		●
VC-30HD		Input	HDMI Input	Input	HDV/DV/MPEG-2 TS	●	

Video Editors DV-7DL G

V-1600HD | Multi-Format Video Switcher

An all-in-one multi-format live video switcher

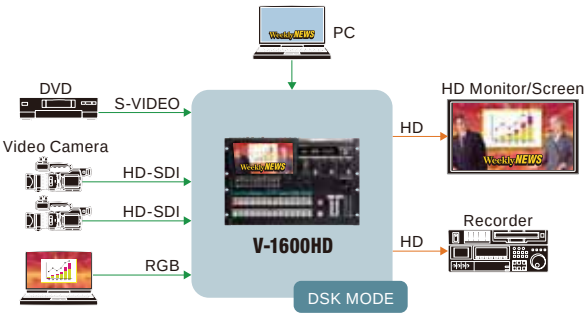




- **All-in-one 14 channel (16 input) seamless switcher/mixer**
- **Ready to connect anything: SDI, DVI/HDMI, RGB, Component, S-Video, Composite**
- **Built-in high-res preview monitor, frame synchronizer and scalers**
- **Independent multi-format outputs including edge-blending**
- **Downstream Keyer, Composite Keyer and Picture-in-Picture**
- **SPAN, DUAL and SPLIT modes offer a variety of output configurations**
- **Use one camera to create multiple perspectives for virtual multi-camera production**

DSK Mode

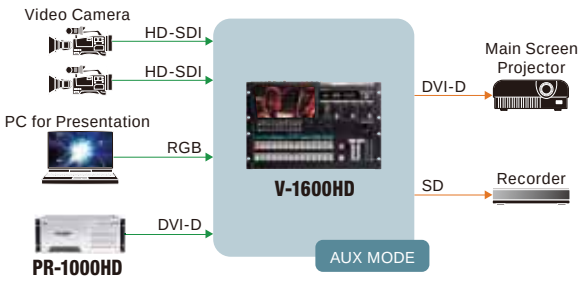
Text/Graphics from a PC/Mac can be composited on background video content.



* In DSK mode, outputs are same format.

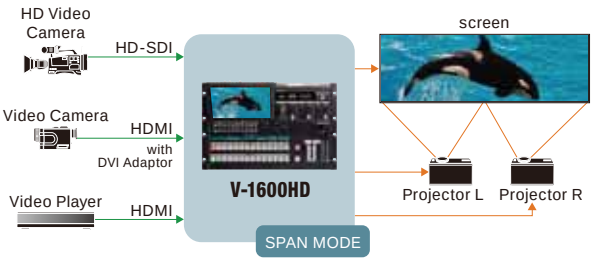
AUX Mode

Two different video formats can be output simultaneously.



SPAN Mode

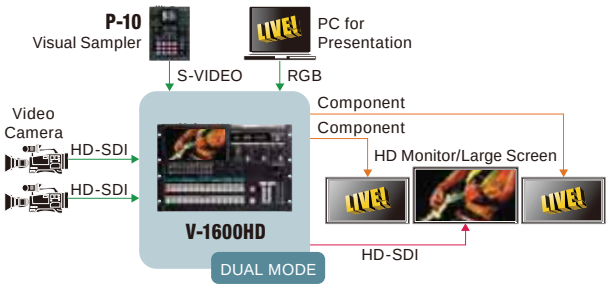
Displays a single image across two screens. Built-in Edge Blending enables seamless image across a wide screen.



* At SPAN Mode, PinP, Key, DSK, External Control are not available. Video transitions are CUT and Mix (Fade In/Out).

DUAL Mode

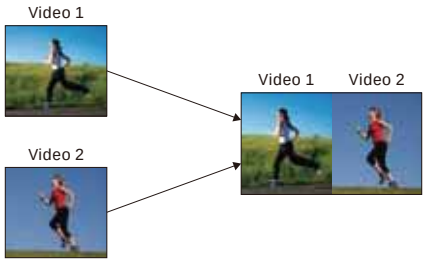
Using the DUAL Mode, two video inputs can be switched individually. Switching both inputs at same time is also possible. Preview monitoring of each output enables confident operation.



* In DUAL Mode, PinP, Key, DSK, External Control are not available. Video transitions available are CUT and Mix (Fade In/Out).

SPLIT Mode

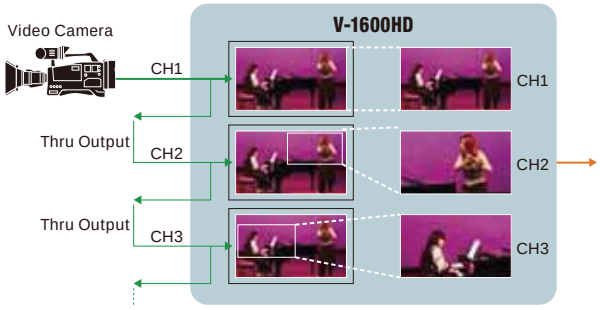
Using SPLIT Mode, two video inputs can be displayed on one display. This is useful for comparing two videos on a single screen.



* In SPLIT Mode, PinP, Key, DSK, External Control are not available. Video transitions available are CUT and Mix (Fade In/Out).

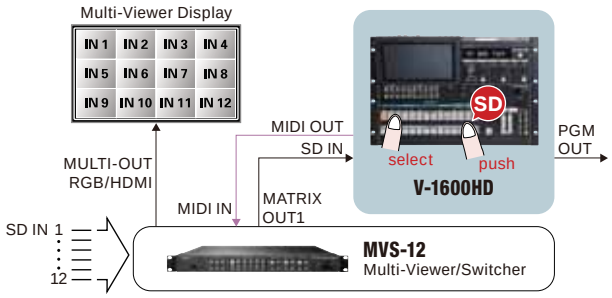
Multi-Zoom

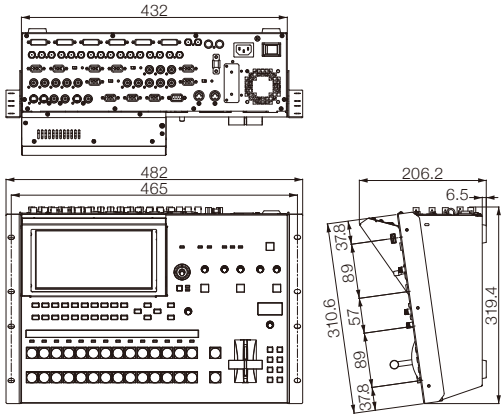
Using the thru out connectors, one video input can be daisy-chained to multiple inputs. The scaler for each input can zoom into any position in the video image enabling a virtual multi-camera environment. This gives the appearance that you have additional cameras.



Expansion of SD Inputs

The Matrix Switcher function enables the V-1600HD mixer to access additional SD inputs. By connecting a MIDI cable and using the V-LINK function, the V-1600HD can directly select any video source from the MVS-12.





Unit: mm

SPECIFICATIONS V-1600HD

Video Processing	
Processing	4:2:2 (Y:Pb:Pr), 10 bit
Supported Formats	SD : 480/59.94i, 576/50i, 480/59.94p, 576/50p HD : 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p RGB : 640 x 480/60Hz, 800 x 600/60Hz, 1024 x 768/60Hz, 1280 x 768/60Hz, 1280 x 1024/60Hz, 1600 x 1200/60Hz, 1920 x 1200/60Hz * Confirms to VESA DMT Ver. 1.0 Revision 10 * When PAL is selected, RGB refresh rate from 640 x 480 to 1280 x 1024 is 75Hz * Reduced blanking to be applied to 1920 x 1200 STILL : BMP
Input/Output Level and Impedance	
Composite	1.0 Vp-p, 75 ohms
S-Video	Luminance Signal : 1.0 Vp-p, 75 ohms Chrominance Signal : 0.286 Vp-p, 75 ohms (NTSC) , 0.3 Vp-p, 75 ohms (PAL)
Analog HD/RGB	0.7 Vp-p, 75 ohms (H, V : 5VTTL)
Input Connectors * Loop thru connectors are equipped for all inputs	
Analog SD	S-Video (4 pin mini DIN type) x 1, Composite (BNC type) x 1 * Select one from menu
Analog HD (Component)	Y/Pb/Pr (BNC type) x 2, D-Sub 15 pin type x 2 * Combined use with analog RGB
Analog RGB	R/G/B/H/V (BNC type) x 2, D-Sub 15 pin type x 2 * Combined use with analog HD (Component)
DVI-D	Single Link Type x 2
HD/SD-SDI	BNC type x 8 * Conforms to SMPTE 259M-C, SMPTE 292M
Output Connectors	
Analog SD	S-Video (4 pin mini DIN type) x 1, Composite (BNC type) x 1
Analog HD (Component)	Y/Pb/Pr (BNC type) x 1, D-Sub 15 pin type x 1 * D-Sub 15 pin type : combined use with analog RGB
Analog RGB	D-Sub 15 pin type x 1 * Combined use with analog HD (Component)
DVI-D	Single Link Type x 2
HD/SD-SDI	BNC type x 2 Conforms to SMPTE 259M-C, SMPTE 292M
Other Connectors	
TALLY	D-Sub 15 pin type x 3 (200 mA, Open Collector type)
Remote	MIDI (IN, OUT/THRU), RS-422 (D-Sub 9 pin type) x 1
REFERENCE	BNC type (IN, THRU) * Black Burst (Sync to frames), Bi-Level, Tri-Level Sync
USB port (host)	A type x 1 for USB memory
Effects	
Transition	Mix, FAM, NAM, Wipe (9 patterns)
Composition	PinP, Chroma Key, Luminance Key, Split, DSK
Others	Output Fade, Edge Blending, Multi Screen (Video Wall)
Others	
Power Supply	AC117 V, 220 V, 230 V, 240 V (50/60Hz)
Power Consumption	90 W
Dimensions	482 (W) x 319 (D) x 206 (H) mm 19 (W) x 12-5/8 (D) x 8-1/8 (H) inches
Weight	8.1 kg 17 lbs. 14 oz

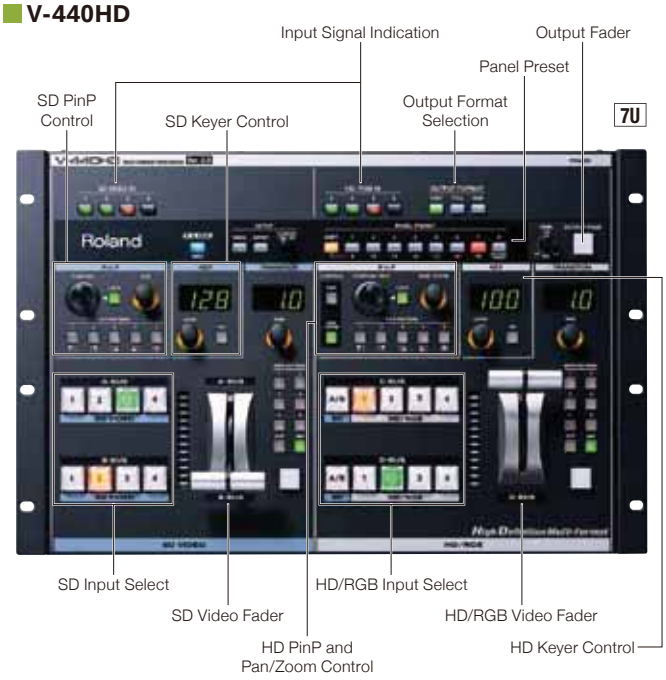
* This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
* This product is intended for use in the following Electromagnetic environments: E1:residential, E2:commercial and light industrial, E3:urban outdoors, E4:controlled EMC environment, ex. recording studio (broadcasting studio) which are specified in EN55103-1 and EN55103-2.

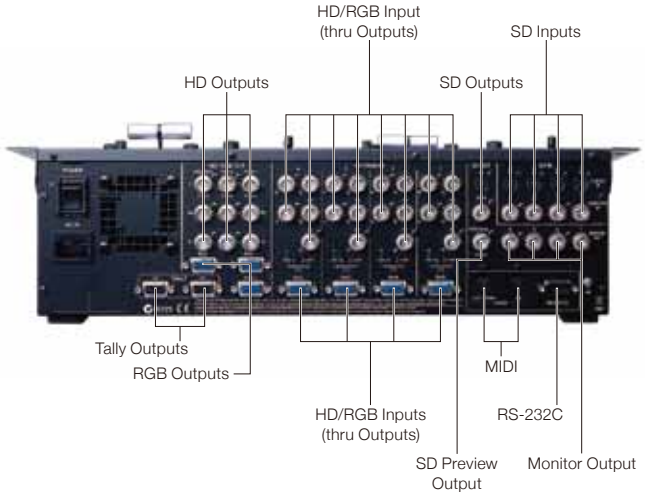
V-440HD | Multi-format Video Mixer V-44SW | Multi-format Video Switcher

Seamless mixing and scaling of multi-format SD/HD/RGB video signals

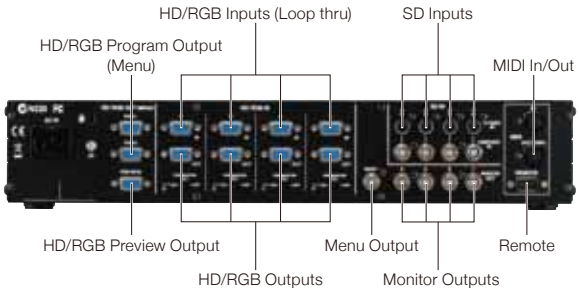
MULTI FORMAT
V-LINK

V-440HD





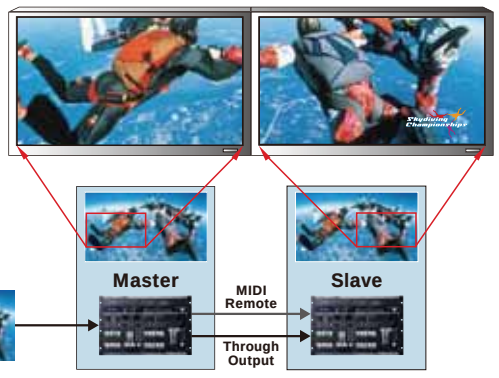
V-44SW

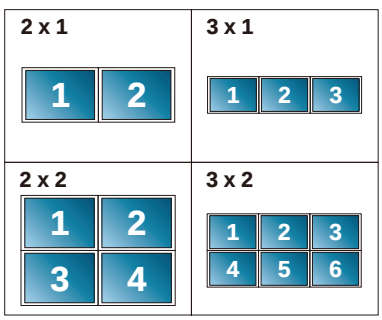


- **Mix SD video, HD video and RGB signals from computers**
- **Selectable output formats; 1080i or 720p for HDTV or RGB for computer display with built-in scaling**
- **Simple and intuitive operation**
- **Dissolve/Wipe transitions, PinP, SD/HD Key compositions**
- **With thru outputs and MIDI sync, multiple units can be connected for output to multiple screens (video walls)**
- **Remote control using RS-232C, V-LINK/MIDI**
- **Panel Preset function up to 15 memory settings**
- **Control the audio input level of the V-Mixer live mixing consoles using V-LINK**
- **Tally Output Terminal (V-440HD Only)**

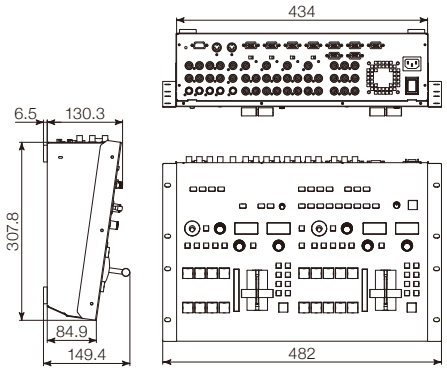
Output to multiple screens

Connecting multiple V-440HD's via MIDI allows easy setup of multi-screen configurations. The multiple screens are treated as one unified surface with PinP and wipes moving across the screens.



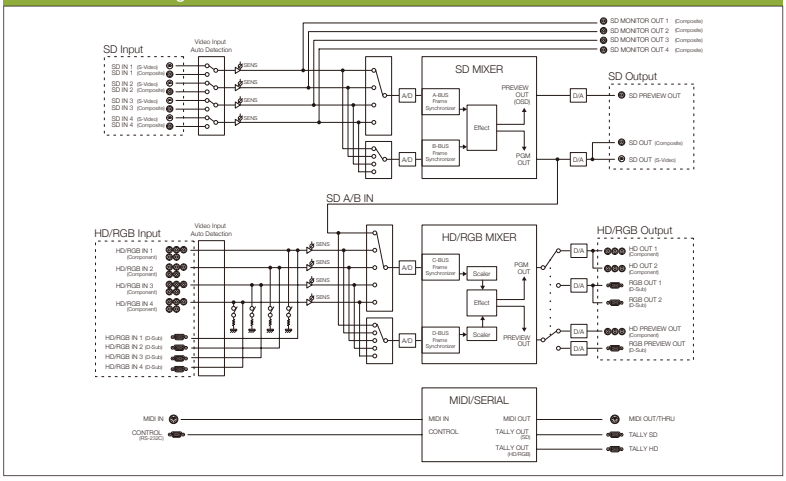


V-440HD Dimension

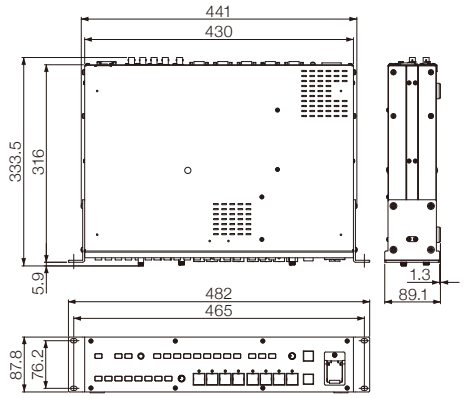


Unit: mm

V-440HD Block Diagram

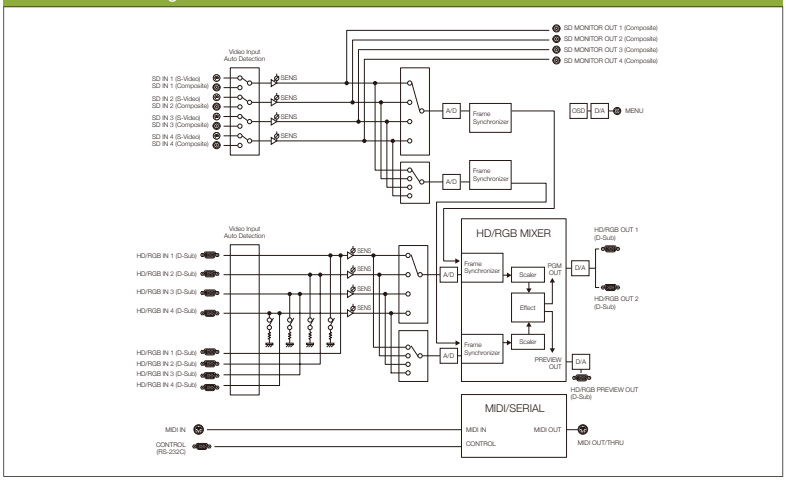


V-44SW Dimension



Unit: mm

V-44SW Block Diagram



SPECIFICATIONS V-440HD/V-44SW

Video Processing	**<Video Format> Standard Definition**: NTSC or PAL [CVBS, S (Y/C)], **High Definition**: 1080/59.94i/50i SMPTE274M (Y/Pb/Pr TriLevelSync), 720/59.94p/50p SMPTE296M (Y/Pb/Pr TriLevelSync), **RGB**: 640 × 480/60/75, 800 × 600/60/75, 1024 × 768/60/75, 1280 × 768/60/75, 1280 × 1024/60, 1366 × 768/75/60 (Output only) (RGB VH: positive/negative logic) * VESA DMT Version 1.0 Revision 10 confirm **<Video Sampling> Standard Definition**: 4:2:2 (Y:B-Y:R-Y), 8-bit sampling, 13.5 MHz (BT.601), **High Definition**: 4:4:4 (Y:Cb:Cr), 8-bit sampling 74.1758 MHz/74.25 MHz, **RGB**: 4:4:4 (G:B:R), 8-bit sampling, 25 MHz to 110 MHz
V-440HD Connectors	**<SD Input> Composite**: BNC Connector x 4, **Y/C (S-video)***: 4-pin MiniDIN Type x 4 (Y: 1 Vp-p, 75-ohms, C: 0.286 Vp-p, 75-ohms (NTSC), 0.3 Vp-p, 75-ohms (PAL) * S-video input has priority **<HD/RGB Input>** BNC Type x 4: **HD**=Y/Pb/Pr (1 Vp-p, 75-ohms, TriLevelSync) or **RGB**=R/G/B (0.7 Vp-p, 75-ohms), H (5 V TTL), V (5 V TTL), D-SUB 15-pin Shrink Type x 4: **HD**=Y/Pb/Pr (1 Vp-p, 75-ohms, TriLevelSync) or **RGB**=R/G/B (0.7 Vp-p, 75-ohms), H (5 V TTL), V (5 V TTL) **<SD Output> PGM S-Video (Y/C)**: 4-pin mini DIN type x 1 (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohms), **PGM Video (composite)**: BNC type x 1 (1.0 Vp-p, 75-ohms), **Monitor (composite)**: BNC type x 4 (1.0 Vp-p, 75-ohms), **Preview/OSD Menu (composite)**: BNC type x 1 (1.0 Vp-p, 75-ohms) **<HD Output> PGM Component HD**: V-440HD: BNC Type x 2 (1.0 Vp-p, 75-ohms, TriLevel Sync), **Preview Component HD**: BNC type x 1 (1.0 Vp-p, 75-ohms, TriLevel Sync), OSD Menu Output (display On/Off is selectable) **<RGB Output> PGM RGB**: D-sub 15-pin Shrink Type x 2 (0.7 Vp-p, 75-ohms, 5 V TTL Sync), **Preview RGB**: D-sub 15-pin Shrink type x 1 (0.7 Vp-p, 75-ohms, 5 V TTL Sync), OSD Menu Output (display On/Off is selectable) **<Tally Output>** D-SUB 15-pin Shrink type x 2 (1 for SD/1 for HD), Max input: 12 V, 200 mA Open Collector Type

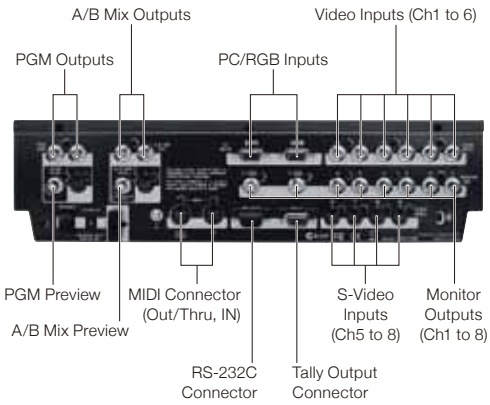
V-44SW Connectors	**<SD Input> S-Video (Y/C)**: 4-pin mini DIN type x 4 (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohms), **Video (composite)**: BNC type x 4 (1.0 Vp-p, 75-ohms) **<HD/RGB Input>** D-SUB 15-pin Shrink Type x 4, **HD**: Y/Pb/Pr (1.0 Vp-p, 75-ohms, TriLevel Sync), **RGB**: R/G/B (0.7 Vp-p, 75-ohms), H (5 V TTL), V (5 V TTL) **<SD Output> Preview (composite)**: BNC type x 4 (1.0 Vp-p, 75-ohms), **Menu Output (composite)**: BNC type x 1 (1.0 Vp-p, 75-ohms) **<HD/RGB Output> HD/RGB PGM**: D-sub 15-pin Shrink Type x 2 (HD: 1.0 Vp-p, 75-ohms, TriLevel Sync, RGB: 0.7 Vp-p, 75-ohms, 5 V TTL Sync), **HD/RGB Preview**: D-sub 15-pin Shrink Type x 1 (HD: 1.0 Vp-p, 75-ohms, TriLevel Sync, RGB: 0.7 Vp-p, 75-ohms, 5 V TTL Sync)
Video Transition	Cut, Dissolve, Wipe: 6 Patterns, Reverse, Soft Edge
Video Composition	Picture in Picture, Chroma Key (Blue/Green), Luminance Key (White/Black)
Multi-screen Presentation	Screen Setup (width by height): 2 x 1, 3 x 1, 2 x 2, 3 x 2
Remote Control Interfaces	MIDI 5-pin DIN type (in/out), RS-232C D-SUB 9-pin
Power Supply	AC 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	50 W
Dimensions	**V-440HD**: 482 (W) x 308 (D) x 130 (H) mm 17-7/8 (W) x 12-3/4 (D) x 4-1/4 (H) inches **V-44SW**: 482 (W) x 308 (D) x 88 (H) mm 19 (W) x 12-1/8 (D) x 3-1/2 (H) inches
Weight	**V-440HD**: 6.8 kg, 15 lbs, **V-44SW**: 6.0 kg, 13 lbs. 4 oz.

Roland

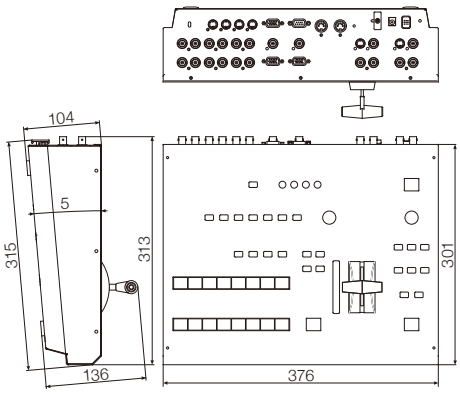
LVS-800 | Video Mix/Live Switcher

Innovative 8-channel video mixer with DSK (Downstream Keyer) and Two separate PC/RGB inputs

V-LINK

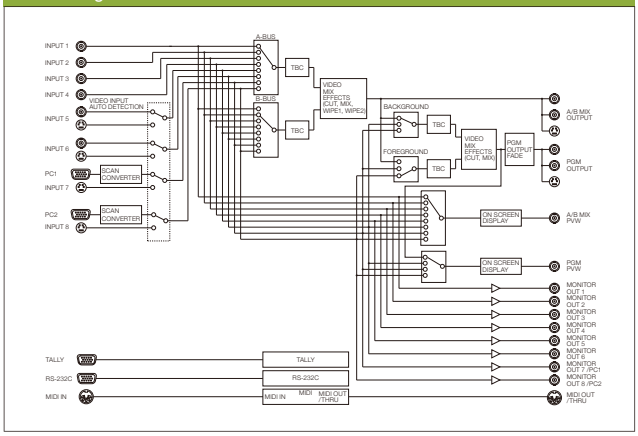


- **8 video inputs and 2 independent outputs for multi-screen applications**
- **Downstream keyer for seamless mixing under title/graphics**
- **Two PC/RGB inputs for mixing between computer sources**
- **Panel Presets for instant recall of mixer configurations**
- **Remote control using RS-232C, V-LINK/MIDI**
- **Equipped with Tally Outputs**



Unit: mm

Block Diagram



SPECIFICATIONS LVS-800

Video Format	**Video**: NTSC or PAL (ITU601) **PC-RGB**: 640 x 480/120 Hz, 800 x 600/120 Hz, 832 x 624/80 Hz, 1024 x 768/80 Hz, 1152 x 864/80 Hz, 1152 x 870/75 Hz, 1280 x 1024/75 Hz, 1600 x 1200/60 Hz (RGB VH: positive/negative logic) * VESA DMT Version 1.0 Revision 10 conform. * The refresh rate is the maximum value of each resolution.
Sampling Rate	Video 4:2:2 (Y:B-Y:R-Y), 8-bit, 13.5 MHz
Frame Synchronizer	4 Systems
Video Transition	**A/B MIX**: Cut, Mix (Dissolve, FAM, NAM), Wipe (Hard edge wipe, Soft edge wipe), **DSK**: Cut, Mix (Dissolve)
Video Composition	**A/B MIX**: Picture in Picture **DSK**: Luminance Key, Chroma Key, Picture in Picture
Input Level/ Impedance	**Video (Composite)**: 1.0 Vp-p, 75-ohms **S-Video**: Luminance Signal 1.0 Vp-p, 75-ohms, Chroma Signal 0.286 Vp-p, 75 (NTSC)/0.3 Vp-p, 75 (PAL) **PC-RGB**: 0.7 Vp-p, 75 (H, V: 5 V TTL)
Output Level/ Impedance	**Video (Composite)**: 1.0 Vp-p, 75-ohms **S-Video**: Luminance Signal 1.0 Vp-p, 75-ohms, Chroma Signal 0.286 Vp-p, 75 (NTSC)/0.3 Vp-p, 75 (PAL)

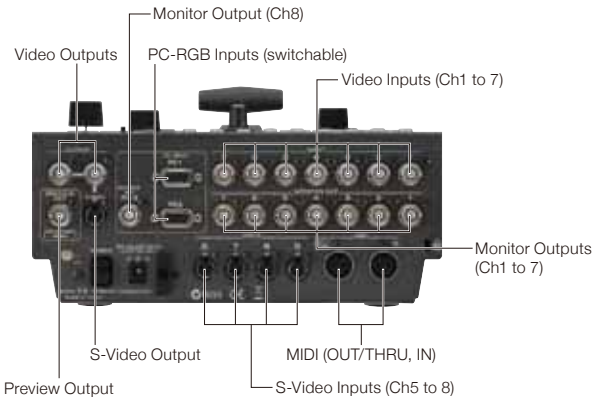
Connectors	<Input> **Video (Composite)**: BNC type x 6 (Ch1 to 6) **S-Video**: 4-pin mini DIN type x 4 (Ch5 to 8) **PC-RGB**: D-SUB 15-pin shrink type x 2 (Ch7 to 8) * S-Video input takes priority for channels 5 to 8. <Output> **A/B MIX**: 4-pin mini DIN type x 1, BNC type x 2 + Preview x 1 (*1), **PGM-OUT**: 4-pin mini DIN type x 1, BNC type x 2 + Preview x 1 (*2) *1: Preview displays one of input channel 1 to 8 video and on-screen menu. *2: Preview displays one of input channel 6 to 8 video and A/B MIX OUT video. <Monitor Output> **Video (Composite)**: BNC type x 8 (Ch1 to 8)
Remote Control Interfaces	MIDI (IN, OUT/THRU), RS-232C (D-SUB 9-pin type)
Tally Output	D-sub 15-pin shrink type, maximum Input = 12 V, 200 mA open collector type
Power	AC Adaptor (Accessory)
Current Draw	2,200 mA
Dimensions	376 (W) x 315 (D) x 136 (H) mm, 14-13/16 (W) x 12-7/16 (D) x 5-3/8 (H) inches
Weight	4.3 kg, 9 lbs 8 oz
Accessories	AC Adaptor, BNC to RCA video adapter x 4

Roland

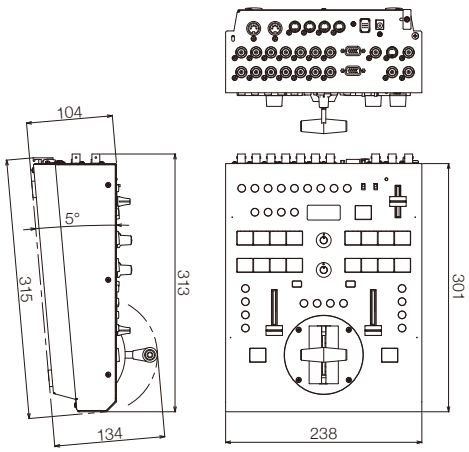
V-8 | 8-Channel Video Mixer

Powerful Eight Input Video Mixer with Two PC/RGB Inputs

V-LINK



- **8 video inputs including built-in scan converter for RGB input**
- **High image quality 4:2:2 full-frame digital processing**
- **Support for RGB input (VGA to UXGA)**
- **Luminance key, chroma key enables logos or text from computer to be overlayed over background video**
- **Over 260 patterns of various transitions including Mix, Wipe, Key, Slide, Stretch etc.**
- **Equipped with 25 categories/150 patterns of video effects such as colorize, negative, feedback, after image etc.**
- **Picture in Picture, Luminance Key and Chroma key are available for compositing videos**
- **Independent monitor outs for each video input**
- **V-LINK control enabling audio-follows video with V-Mixers**



Unit: mm

Over 260 Transitions

Example video transitions

Video Effects Examples

SPECIFICATIONS V-8

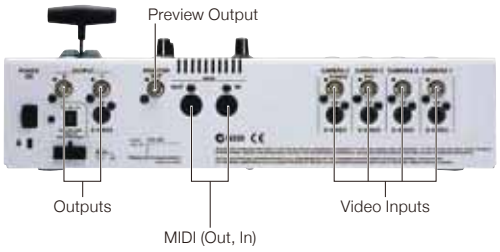
Video Format	**Video**: NTSC or PAL (ITU601) **PC-RGB**: 640 x 480/120 Hz, 800 x 600/120 Hz, 832 x 624/75 Hz, 1024 x 768/80 Hz, 1152 x 864/80 Hz, 1152 x 870/75 Hz, 1280 x 1024/75 Hz, 1600 x 1200/60 Hz (RGB VH: positive/negative logic) * VESA DMT Version 1.0 Revision 10 conform. * The refresh rate is the maximum value of each resolution.
Video Sampling Rate	4:2:2 (Y:B-Y:R-Y), 8-bit, 13.5 MHz
Frame Synchronizer	2 systems
Connectors	<Input> **Video (composite)**: BNC type x 7 (Ch1 to 7) **S-video**: 4-pin mini DIN type x 4 (Ch5 to 8) **PC-RGB**: D-SUB 15pin Shrink Type x 2 (Ch8: PC1/PC2) * Inputs 5 to 8; however if S-video is simultaneously input to 5 to 8, S-video takes priority. <Output> **Video (composite)**: BNC type x 2 **S-video**: 4-pin mini DIN type x 1 <Preview Output> **Video (composite)**: BNC type x 1 (OSD Menu) <Monitor Output> **Video (composite)**: BNC type x 8 (Ch1 to 8)

Remote Control Interfaces	**MIDI IN**: 5-pin DIN type x 1, **MIDI OUT/THRU**: 5-pin DIN type x 1
Transition Effects (more than 260 types)	Mix (Dissolve, Non-Additive Mix: NAM, Full-Additive Mix: FAM), Wipe (Hard edge wipe, Soft edge wipe), Key, Slide, Stretch, User Transition
Video Effects	Still, Strobe, Afterimage, Feedback, Shake, Negative, Colorize, Find Edge, Silhouette, Mono Color, Emboss, Posterize, Color Pass, Luminance key, Chroma key, Flip, Multi, Mirror, Picture-in-picture
Power Supply	DC 9 V (AC Adaptor: Roland PSB-1U)
Current Draw	2 A (Preliminary, AC Adaptor PSB-1U 0.4 A)
Dimensions	238 (W) x 315 (D) x 134 (H) mm, 9-3/8 (W) x 12-7/16 (D) x 5-5/16 (H) inches
Weight	3.2 kg, 7 lbs. 1 oz.
Accessories	AC Adaptor, Power Cord, BNC to RCA video adapter x 4, Mount screw for Video fader x 4, Owner's Manual

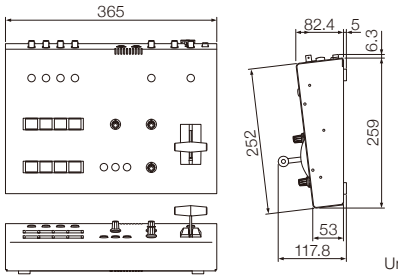
LVS-400 | Video Mix/ Live Switcher

Intuitive and stable mixing/ switching of four video sources

V-LINK



- **Designed as presentation mixer**
- **4 inputs and 3 outputs with an easy to use interface and simple operation**
- **PinP, composition and transition effects in real time**
- **DV image quality maintained by built-in frame synchronizers**
- **V-LINK/MIDI provides integration options with other devices**



Unit: mm

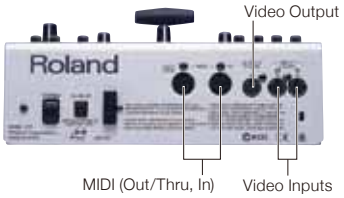
SPECIFICATIONS LVS-400

Video Format	NTSC or PAL (ITU601), **Video Sampling Rate**: 13.5 MHz, 4:2:2 (Y:B-Y:R-Y), 8-bit, Frame Synchronizer x 2
Video Input	**S-Video**: 4-pin mini DIN type x 4 **Video (composite)**: BNC type x 4 (If S-Video is simultaneously, S-Video takes priority)
Video Output	**S-Video**: 4-pin mini DIN type x 1 **Video (composite)**: BNC type x 2
Monitor Output	**Video (composite)**: BNC type x 1
Input/Output Level and Impedance	**Composite**: 1 Vp-p, 75-ohm, **S-Video**: Luminance signal=1 Vp-p, 75-ohm, Chroma signal=0.286 Vp-p, 75-ohms (NTSC)/0.3 Vp-p, 75-ohms (PAL)
Remote Control Interface	**MIDI (In/Out)**: 5-pin DIN type
Transition Effects	Mix (Dissolve), Wipe 1, Wipe 2
Composite Effects	Picture-in-Picture (4 types), Luminance Key (2 types), Chroma Key
Power Supply	DC 9 V (AC Adaptor)
Current Draw	1500 mA
Dimensions	365 (W) x 259 (D) x 87 (H) mm 14-3/8 (W) x 10-1/4 (D) x 3-7/16 (H) inches
Weight	3.0 kg, 6 lbs. 9 oz.
Accessories	AC Adaptor, BNC-RCA Adapter x 4

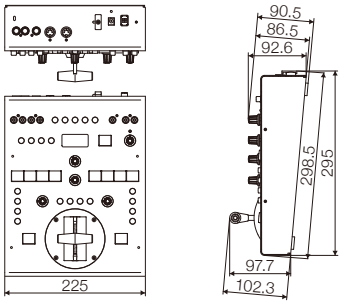
V-4 | 4-Channel Video Mixer

Four input video mixer with many high quality video effects

V-LINK



- **Designed as performance mixer**
- **4 inputs and 3 outputs enabling switching, mixing and compositing of any two inputs**
- **DV quality images with clean digital processing**
- **Independent 2 channel TBC enables smooth mixing/switching**
- **More than 90 types of effects and more than 240 types of wipe patterns**
- **BPM Sync to match visuals to the beat of the music**
- **V-LINK/MIDI provides synchronization with sound**



Unit: mm

SPECIFICATIONS V-4

Video Format	NTSC or PAL (ITU601), **Video Sampling Rate**: 13.5 MHz, 4:2:2 (Y:B-Y:R-Y), 8-bit, Frame Synchronizer x 2
Transition Effects	Hard Edge Wipe, Soft Edge Wipe, Multi-Border Wipe, Slide
Video Effects	Still, Strobe, Shake, Negative, Colorize, Mono Color, Posterize, Color Pass, Multi, Mirror
Compositing Effects	Picture-in-Picture, Chroma Key, Luminance Key
Video Input	**S-Video**: 4-pin mini DIN type x 2 **Video (composite)**: RCA pin type x 4 (If S-Video is simultaneously, S-Video takes priority)
Video Output	**S-Video**: 4-pin mini DIN type x 1 **Video (composite)**: BNC type x 2
Preview Output	**Video (composite)**: RCA pin type x 1
Remote Control Interface	**MIDI (In/Out)**: 5-pin DIN type
Power Supply	AC Adaptor
Current Draw	1500 mA
Dimensions	225 (W) x 295 (D) x 105 (H) mm 8-7/8 (W) x 11-5/8 (D) x 4-3/16 inches
Weight	2.3 kg, 5 lbs. 2 oz.
Accessories	AC Adaptor, T-Bar attachment screws x 4 (spares)

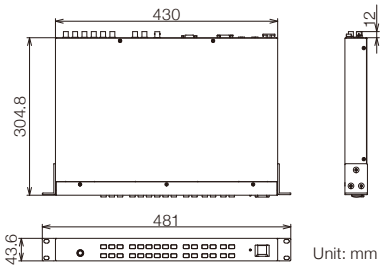
Roland

MVS-12 | Multi-Viewer/Switcher

Multi-viewer with simple matrix switcher for convenient video monitoring

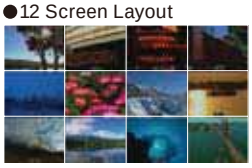
NEW

- **Groups and displays up to 12 SD video signals to a single HD or RGB monitor**
- **Matrix switcher function enables ability to assign 12 inputs to 4 different outputs**
- **Four setups can be stored and recalled**
- **Controllable via Ethernet, RS-232C and MIDI**
- **Displays channel selection on monitor using V-LINK**

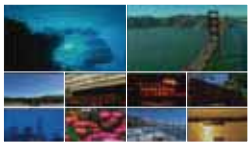


4 Multi-Viewer Layouts

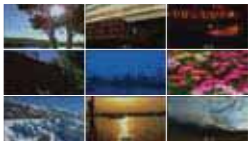
●12 Screen Layout



●10 Screen Layout



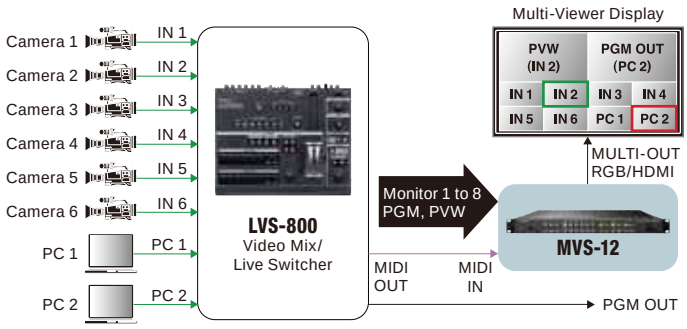
●9 Screen Layout



●4 Screen Layout

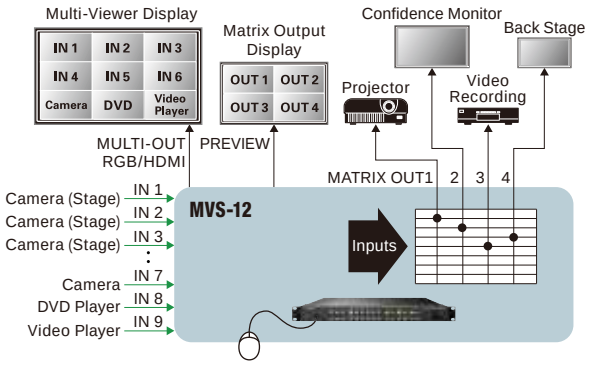
Multi-viewer and Matrix switcher function enables system expansion

●Monitoring for Switcher



The MVS-12 is a perfect companion for the LVS-800 allowing you to preview all monitor outputs. Using a MIDI connection the PGM/PVM video source is displayed and indicated by a red frame and green frame (tally).

●Monitoring for Video Installation



Video sources can be distributed to up to four different locations.

SPECIFICATIONS MVS-12

Video Format	**Composite**: NTSC or PAL **HDMI, PC-RGB**: 1920 x 1080 (60 / 50 Hz), 1680 x 1050 (60 / 75 Hz),1600 x 900 (60 / 75 Hz), 1440 x 900 (60 / 75 Hz), 1280 x 1024 (60 / 75 Hz), 1280 x 720 (60 / 50 Hz), 1024 x 768 (60 / 75 Hz) (Progressive Scan)
Sampling Rate	4:2:2 (Y:B-Y:R-Y), 8-bit, 13.5 MHz (ITU-R BT.601)
Input / Output Level and Impedance	**Composite**: 1.0 Vp-p, 75 ohms **PC-RGB**: 0.7 Vp-p, 75 ohms (H, V : 5V TTL)
Connectors	**Video Input Composite**: BNC type x 12 jacks **Output Connectors Composite (for MATRIX OUT)**: BNC type x 4 jacks **Composite (for MATRIX OUT Preview)**: BNC type x 1 jack HDMI (for MULTI-OUT, MENU) x 1 jack **PC-RGB (for MULTI-OUT, MENU)**: D-Sub 15pin type x 1 jack
Other Connectors	Ethernet 10 / 100Base-Tx RJ45 type x 1 jack RS-232C DB-9 type x 1 jack MIDI IN 5-pin DIN type x 1 jack MIDI OUT / THRU 5-pin DIN type x 1 jack Mouse PS/2 type *Not bundled.

Power Supply	AC Adaptor (Accessory)
Current Draw	2 A
Dimensions	481 (430 without rack mount bracket)(W) x 320 (D) x 44 (H) mm 18-15/16 (16-15/16 without rack mount bracket) x 12-5/8 (D) x 1-3/4 (H) inches
Weight	3.0 kg 6 lbs. 10 oz. (without AC Adaptor)

* **MONITOR**: XGA (1024x768 pixels) or greater, HDMI or Analog RGB input is required.
HDMI OUTPUT Connection: Audio is not supported. HDMI version is 1.2. Supports EDID when the setup is AUTO.
RGB OUTPUT Connection: Manual pixel rate setup is needed.
Aspect Ratio: In MULTI-OUT, display aspect and each input aspects can be adjusted individually. MATRIX OUTPUT has no aspect adjustment function.
Switching: An mixed image before and after switching may appear on MATRIX Output at switching.

VR-5 | AV Mixer & Recorder

All-in-one AV Mixer for stand-alone recording and live streaming

NEW

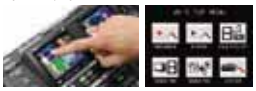
USB Port for Live Streaming
Connect to a PC via USB

* The world's first USB Video/Audio Class supported AV mixer. Simply connect like a Web camera to enable easy live streaming. *Our research at time of printing

MONITOR
Intuitive operation with Dual Touch Monitors

Select the input source by touching the quad-view layout display.

Menu parameters are easily accessed and set.

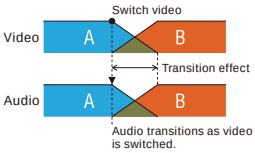


PC INPUT
Audio and video from a PC

RGB input and stereo-mini Audio input

AUDIO MIXER
Full digital audio mixing

Audio Follow function



VIDEO/PC SELECT
Video switching with a single touch of a button

VIDEO/AUDIO OUTPUT

RECORDER
Record to SD memory card

Supports SD and SDHC memory cards.

Note: Video can not be played back when recording.

VR-5 Image Converter (Win/Mac)

Software for preparing data to be played back from the VR-5 is available from the Roland Systems Group website.

Supported Formats:
AVI, MPG, MOV, WMV, MP4, DV

KEYER
Control transparency with a single knob

Chroma Key Composite a person over a background

Luminance Key Composite text over a background

VIDEO EFFECTS
Simple video compositing

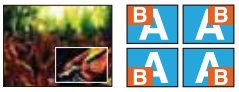
Transition between sources with various switching effects

Mix

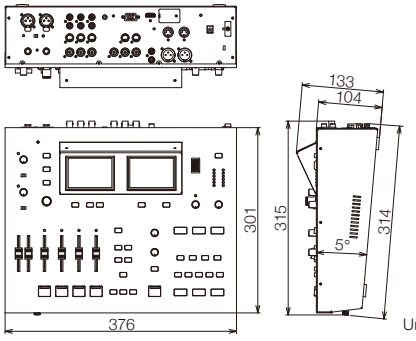
Wipe

SPLIT displays two video sources simultaneously

PinP inlays a small window in the main source



- **5-Channel Video Switcher (3 video sources, PC input, video playback)**
- **2 Mono and 5 Stereo Mixable Audio Channels**
- **Built-in scan converter for PC input**
- **Built-in dual LCD monitors with touch control for easy video source selection**
- **Three video layers for 2 video sources plus DSK (downstream keyer)**
- **Video player/recorder**
- **USB video/audio class device for web streaming**



Unit: mm

Let's start live streaming with easy 4 steps!

1 Connect cameras

Composite or S-Video sources including DVD players.

2 Connect microphones

Any type of mic including condensers.

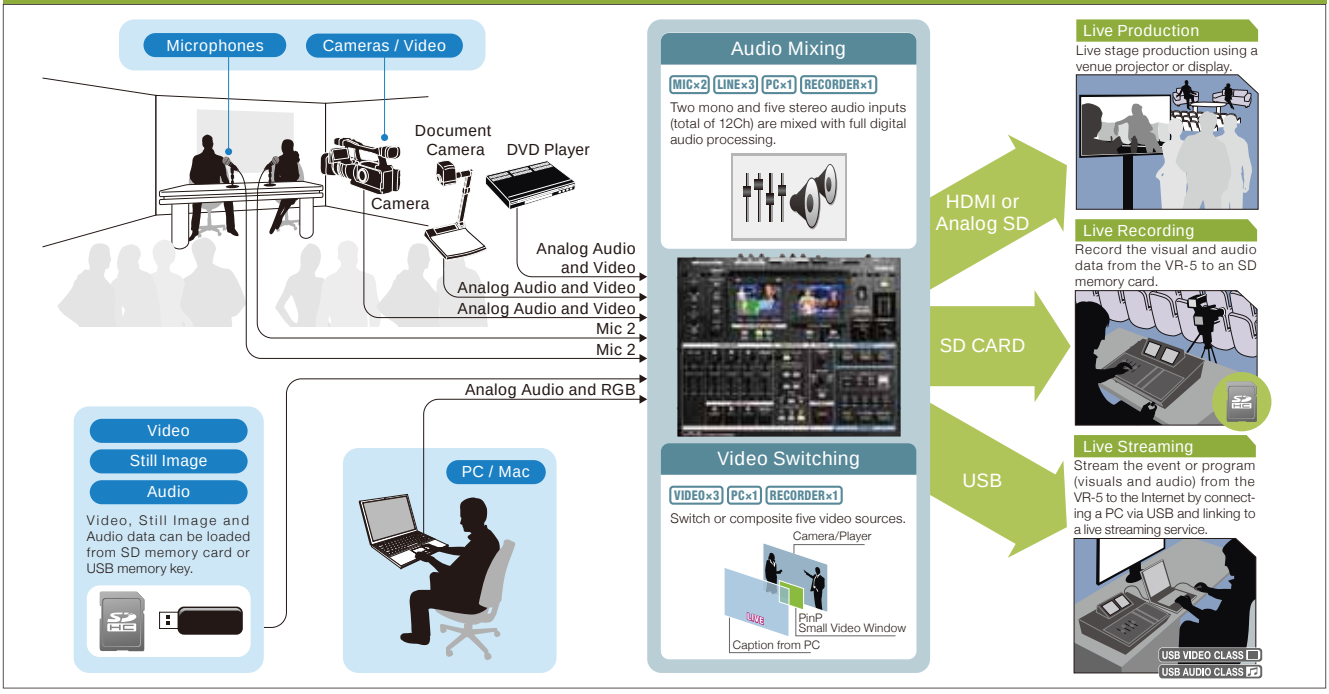
3 Connect PC via USB

Via USB, the VR-5 appears like a web cam

4 Stream online + Capture live

Live broadcasting using various web streaming services

Everything you need in a single device


Microphones
Cameras / Video
Document Camera
DVD Player
Camera
Analog Audio and Video
Analog Audio and Video
Analog Audio and Video
Mic 2
Mic 2
Analog Audio and RGB
Video
Still Image
Audio
Video, Still Image and Audio data can be loaded from SD memory card or USB memory key.
PC / Mac
Audio Mixing
MIC×2 LINE×3 PC×1 RECORDER×1
Two mono and five stereo audio inputs (total of 12Ch) are mixed with full digital audio processing.
Video Switching
VIDEO×3 PC×1 RECORDER×1
Switch or composite five video sources.
Camera/Player
PinP
Small Video Window
Caption from PC
HDMI or Analog SD
SD CARD
USB
Live Production
Live stage production using a venue projector or display.
Live Recording
Record the visual and audio data from the VR-5 to an SD memory card.
Live Streaming
Stream the event or program (visuals and audio) from the VR-5 to the Internet by connecting a PC via USB and linking to a live streaming service.
USB VIDEO CLASS
USB AUDIO CLASS

SPECIFICATIONS VR-5

VIDEO

Video Format	**Video**: NTSC or PAL (ITU601) **PC-RGB**: 640 x 480/120 Hz, 800 x 600/120 Hz, 1024 x 768/80 Hz, 1152 x 864/75 Hz, 1280 x 1024/75 Hz, 1600 x 1200/60 Hz (RGB VH: positive/negative logic) * VESA DMT Version 1.0 Revision 10 conform. * The refresh rate is the maximum value of each resolution.
Video Sampling Rate	**Video**: 4:2:2 (Y:B-Y:R-Y), 8 bits, 13.5 MHz
Input Level and Impedance	<**Video (composite)**> 1.0 Vp-p, 75 ohms <**S-video**> **Luminance signal**: 1.0 Vp-p, 75 ohms **Chrominance signal**: 0.286 Vp-p, 75 ohms (NTSC) / 0.3 Vp-p, 75 ohms (PAL) <**PC-RGB**> 0.7 Vp-p, 75 ohms (H, V: 5 V TTL)
Output Level and Impedance	<**Video (composite)**> 1.0 Vp-p, 75 ohms <**S-video**> **Luminance signal**: 1.0 Vp-p, 75 ohms **Chrominance signal**: 0.286 Vp-p, 75 ohms (NTSC) / 0.3 Vp-p, 75 ohms (PAL)
Connectors	<**Input**> **Video (composite)**: BNC type x 3, **S-video**: 4-pin mini DIN type x 3, **PC-RGB**: D-Sub 15-pin Shrink type x 1 * Inputs 1 to 3; When S-video is simultaneously input to 1 to 3, S-video takes priority <**Output**> **Video (composite)**: BNC type x 2, **S-video**: 4-pin mini DIN type x 2 <**Preview Output**> **Video (composite)**: BNC type x 1

AUDIO

Internal Processing	**Sample Rate**: 24-bit/48.0 kHz
Input Level	<**AUX AUDIO INPUT**> +4 dBu to -68 dBu (variable) **Max**: +22 dBu <**Channel 1/2/3**> –10 dBu **Max**: +8 dBu <**PC AUDIO**> –15 dBu **Max**: +3 dBu
Input Impedance	<**AUX AUDIO INPUT**> **XLR type**: 4 k ohms, TRS phone type: 6 k ohms <**Channel 1/2/3 and PC AUDIO**> 15 k ohms
Input Level	**AUX AUDIO INPUT**: XLR-3-31 type (balanced, phantom power), 1/4 inch TRS phone type (balanced/unbalanced) * TRS type takes priority **Channel 1/2/3**: RCA phono type **PC AUDIO**: Stereo miniature type
Output Level	<**AUDIO OUTPUT**> –10 dBu **Max**: +8 dBu <**PHONES**> 50 mW + 50 mW
Output Impedance	<**AUDIO OUTPUT**> **XLR type**: 600 ohms, **TRS phone type**: 1 k ohms <**PHONES**> 10 ohms
Output Connectors	**AUDIO OUTPUT**: XLR-3-32 type (balanced), RCA phono type **PHONES**: Stereo 1/4 inch phone type

RECORDER

Recording Format	<**Format**> MP4 (.mp4) **Video Codec**: MPEG-4 Visual **Audio Codec**: MP3 (MPEG-1 Audio Layer-3)
Bit Rate	2 Mbps, 4 Mbps, 6 Mbps
Media	SD Memory Card (1 to 2 GByte), SDHC Memory Card (Max 32 GByte), Class 4 or greater
File System	FAT32 (Max file size of 4 GByte)
Movie Size	**TV Size**: NTSC (720 x 480), PAL (720 x 576)
File System	Recorded file is up to 4 GByte. **Bit Rate at 2 Mbps**: approximately 4 hours/4 GByte **Bit Rate at 4 Mbps**: approximately 2 hours/4 GByte **Bit Rate at 6 Mbps**: approximately 80 minutes/4 GByte
Supported Playback Format	<**Video File Format**> .MP4, .AVI **Video Codec**: MPEG-4 Visual **Audio Codec**: MP3 (MPEG-1 Audio Layer-3) <**Audio File Format**> .WAV, .MP3 <**Picture File Format**> .BMP, .JPG

OTHER CONNECTORS

HDMI Connector	<**Resolution**> **Setup to NTSC**: 480p, **Setup to PAL**: 576p OUTPUT or PREVIEW OUTPUT
USB A Type Connector	For USB Storage device, For USB Video Stream output (Support UVC/UAC) USB 2.0 High-Speed
Remote Control Interfaces	**MIDI IN**: 5-pin DIN type x 1 jack **MIDI OUT/THRU**: 5-pin DIN type x 1 jack

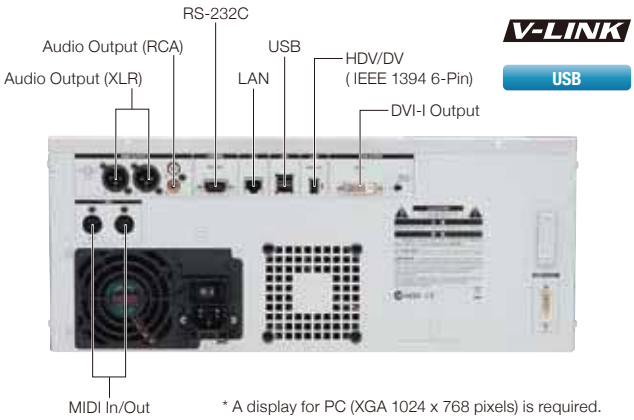
OTHERS

Transition Effects	**Switcher**: Cut, Mix, Hard edge wipe, Soft edge wipe **DSK**: Cut, Mix
Video Effects	Luminance key, Chroma key, Picture-in-picture, Split
Power Supply	DC 12 V (AC Adaptor)
Current Draw	3 A (AC Adaptor)
Dimensions	376 (W) x 315 (D) x 133 (H) mm 14-13/16 (W) x 12-3/8 (D) x 5-1/4 (H) inches
Weight	4.3 kg, 9 lbs 8 oz (without AC Adaptor)

(0dBu=0.775Vrms)

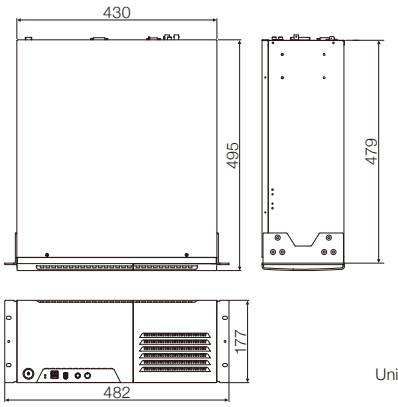
PR-1000HD | Multi-Format Video Presenter

Multi-Format video player with up to 1080p output quality



* A display for PC (XGA 1024 x 768 pixels) is required.

- **Instant Playback of Multiple Formats - HD, SD and/or Stills**
- **Intuitive Graphic User Interface with Touch Screen Option**
- **Stable Platform for Reliable Worry-free Performance**
- **DVI-I Output with Selectable Output Resolutions**
- **A maximum of 20 hours of video material can be captured to one HDD**
- **Smooth and high quality playback for any applications where visuals are used**



Unit: mm

PLAY MODE Screen

EDIT MODE Screen

EDIT MODE enables organization and content management of clips.

Option

HDD-250
250 GB Hard Disk Drive

SPECIFICATIONS PR-1000HD

Video Format	Video: HDV, MPEG (HDV, DV, AVI), STILL: (JPEG, BMP)
Video Input	<IEEE1394> HDV: 1080i, 720p, DV: NTSC or PAL *Supported frame rates differ according to regional specification.
Video Output	<DVI-I> [NTSC]-Digital: 1920 x 1080/59.94p, 1920 x 1080/59.94i, 1280 x 720/59.94p, 1920 x 1080/29.97p, 1920 x 1200/60 Hz, 1280 x 1024/60 Hz, 1280 x 960/60 Hz, 1024 x 768/60 Hz, 640 x 480/60 Hz, [NTSC]-Analog: 1920 x 1080/59.94i, 1280 x 720/59.94p, 1920 x 1200/60 Hz, 1280 x 1024/60 Hz, 1280 x 960/60 Hz, 1024 x 768/60 Hz, 640 x 480/60 Hz [PAL]-Digital: 1920 x 1080/50p, 1920 x 1080/50i, 1280 x 720/25p, 1920 x 1080/25p, 1920 x 1200/50 Hz, 1280 x 1024/75 Hz, 1280 x 960/75 Hz, 1024 x 768/75 Hz, 640 x 480/75 Hz, [PAL]-Analog: 1920 x 1080/50i, 1280 x 720/50p, 1920 x 1200/50 Hz, 1280 x 1024/75 Hz, 1280 x 960/75 Hz, 1024 x 768/75 Hz, 640 x 480/75 Hz * Supported frame rates differ according to regional specification.

Audio Input	HDV: MPEG-1 Layer2 16-bit 48 kHz 384 kbps (stereo) DV: Liner PCM 16-bit 48 kHz (stereo)
Audio Output	XLR (stereo) Balanced, RCA Pin (Stereo) Unbalanced
Display Output	<DVI-I> Digital (RGB): 1024 x 768 (fixed) Analog (RGB): 1024 x 768 (fixed)
Video Output Connecter	DVI-I (Analog/Digital RGB)
Storage	Slot x 2 for Removable HDD (HDD-250), DVD Multi-Drive Optional Item: HDD-250
Control Interfaces	LAN: 10/100/1000 Base-T x 1, RS-232C x 1, MIDI In/Out, USB x 4 (for Card Reader, Mouse, Keyboard, Storage, Optional Touch Panel Display)
Power Supply	AC 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	50 W
Dimensions	482 (W) x 500 (D) x 177 (H) mm 19 (W) x 19-11/16 (D) x 7 (H) inches
Weight	15.2 kg, 33 lbs. 9 oz.

Roland

PR-80 | Realtime Video Presenter PR-50 | Realtime Video Presenter

Instantaneous playback of hundreds of high quality DV video clips

V-LINK

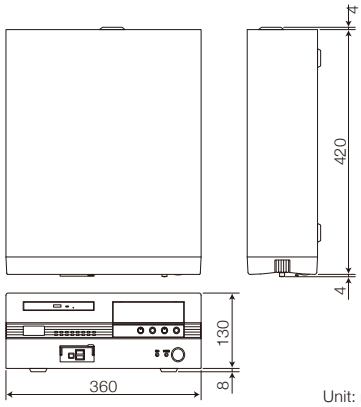
Play Mode Screen (PR-80)

* A display for PC (XGA 1024 x 768 pixels) is required.

- **Playback and switch high quality DV-format video image in real time**
- **Store up to 5 hours of high quality DV video on the internal hard drive**
- **Dual Stream video playback allows cross dissolves, mixing or composition effects (PR-80 Only)**
- **23 types of video effects such as mirroring, colorize, posterize etc. (PR-80 Only)**
- **Automatic operation with the built-in scheduler**
- **Support for MIDI and RS-232C remote control**
- **Equipped with a powerful non-linear video editor (PR-80 Only)**
- **Capture images from a DV or analog video deck or computer via a DV connection**

PR-80 Video Editor Screen

Video editing software included.



Unit: mm

SPECIFICATIONS PR-80/PR-50

Supported Video Systems	NTSC or PAL (Differing according to regional specifications)
Video Format	DV format
Audio Format	PCM (16-bit, 48 kHz)
Connectors	<Front Panel> **Video input & output**: DV Jack (i.LINK), 4-pin type (IEEE1394), **Headphones jack**: stereo 1/4 inch phone type, **Audio input**: 1/4 inch phone type (Mono, PR-80 only), **USB**: connectors x 2 for USB-MIDI interface and dedicated controller. <Rear Panel> **Video input & output**: DV Jack (i.LINK), 4-pin type (IEEE1394), **Video input**: S-Video 4-pin mini DIN type x 1 (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohm), Composite RCA pin type x 1, BNC type x 2 (1.0 Vp-p, 75-ohm), **Audio input**: RCA pin type (L, R), **Video output**: S-Video output 4-pin mini DIN type (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohm), Composite RCA pin type (1.0 Vp-p, 75-ohm), BNC type x 2 (1.0 Vp-p, 75-ohm, PR-80 only), **Audio output**: RCA pin type (L, R)
Display Output	HD DB-15 type (Analog RGB, resolution 1024 x 768 fixed), D-sub 15-pin
Storage Devices	**Internal Hard Disk Drive**: 80 GB (for system program and data storage), **Expansion Slot**: Removable Hard Disk 1 slot (for optional DV-HD series), CD-ROM Drive
Interfaces	**Serial Port**: PS/2 6-pin mini DIN type x 2 (for mouse and keyboard), **LAN Port**: 10/100 Base-T x 1 (to import DV clips and bitmap masks), RS-232C x 1, **USB**: A type x 4 (for optional controller, card reader, and MIDI interfaces)
Power Supply	AC 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	90 W
Dimensions	360 (W) x 420 (D) x 130 (H) mm 14-3/16 (W) x 16-9/16 (D) x 5-1/8 (H) inches
Weight	8.5 kg, 18 lbs. 12 oz.
Accessories	Mouse (PS/2), Mouse Pad, DV Cable, DV-7DLC Template Sheet

* PR-80/PR-50 are installed with software licensed by the following companies: Be Incorporated/Agfa Monotype Corporation.

P-10 | Visual Sampler

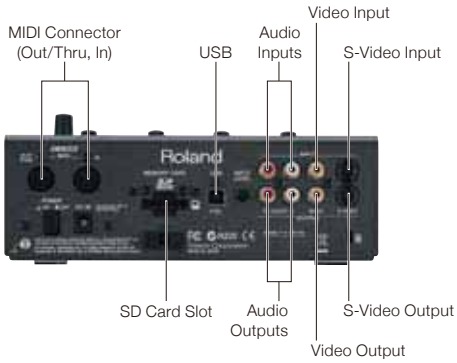
Enjoy easy-to-use, reliable playback of video and still images with dedicated video presenter

V-LINK

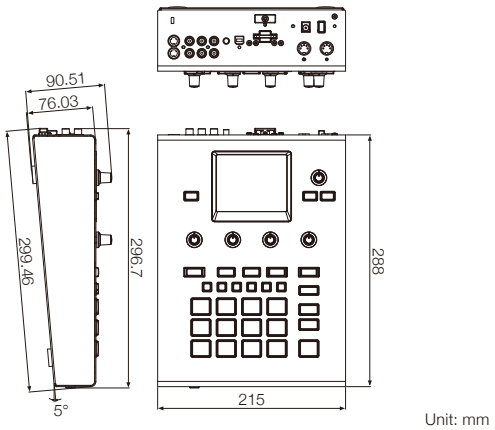
for Windows Vista®/ Windows® XP

for Mac OS X

USB 2.0



- **Record to, and Playback from, standard SD or SDHC Memory Cards**
- **Capturing media from various sources (video decks, DVD players, digital cameras, etc) is extremely easy, and video is stored as Motion JPEG and still images as JPEGs**
- **Playback modes like Reverse, Strobe or Motion Control provide impressive effects for your audience, Slide Show enables animation from multiple still images**
- **Store and recall up to 864 clips using 12 pads and 72 banks**
- **Built-in 3.5 inch color LCD display eliminates the need for an external monitor**
- **Hi-Speed USB port for rapid data transfer of media to and from a computer**
- **Sync your Audio & Video with V-LINK**
- **Includes P-10 Image Converter Software**



Unit: mm

Movie Play Modes

Forward Loop	Loops playback	Gate 1	Plays while a pad is pressed. Pauses the frame when the pad is released. Press again to start from the paused frame.
Alternate Loop	Repeats forward and reverse playback		
One Shot 1	Stops at final frame and pauses	Gate 2	Plays while a pad is pressed. Output is stopped when the pad is released.
One Shot 2	Stops at final frame without pausing		

Easily Capture Movies and Assign Clips to Pads

1 Play back an image on the external device and press the [EXT SOURCE] button.

2 Press the CAPTURE [MOVIE] button at the point that you want to start capturing the movie.

3 Press the CAPTURE [MOVIE] button again at the point that you want to stop capturing the movie. (Empty pads flash red.)

4 Press a pad that is flashing. The captured movie is assigned to the selected pad.

SPECIFICATIONS P-10

Maximum track	Video: 1, Audio: 1 (Stereo)
Video Format	NTSC or PAL (selectable)
Data Format	Movies: Motion JPEG (640 x 480 pixels), 29.97 fps (NTSC), 25 fps (PAL), Still image: JPEG (640 x 480 pixels), Audio: WAV (16-bit/44.1 kHz)
Storage Media	SD or SDHC memory card
Number of Clips	Movies only: up to 864 clips (12 pads x 72 banks), Stills only: up to 86,400 clips (100 images x 12 pads x 72 banks)
Video Playback Mode	Forward Loop, Alternate Loop, One Shot (2 types), Gate (2 types)
Visual Effects	Repeat, Reverse, Strobe, Speed, Color, Output Fade, Slide Show
Controller	Speed, Color, Output Fade

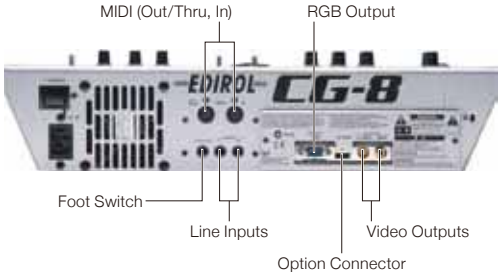
Display	320 x 240 dots QVGA Color Display
Connectors	Composite Video Input: RCA pin type, S-Video Input: 4-pin mini DIN type, Audio Input: RCA pin type (L/R), Composite Video Output: RCA pin type, S-Video Output: 4-pin mini DIN type, Audio Output: RCA pin type (L/R), Headphones: Stereo 1/4 inch Phone type, MIDI (In, Out/Thru), USB
Power Supply	DV 9 V (AC Adaptor)
Current Draw	900 mA
Dimensions	215 (W) x 300 (D) x 91 (H) mm 8-1/2 (W) x 11-13/16 (D) x 3-5/8 (H) inches
Weight	1.9 kg, 33 lbs. 9 oz.

Roland

CG-8 | Visual Synthesizer

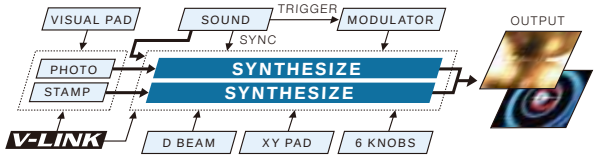
Produce moving 3D effects from still images - all controllable in real-time

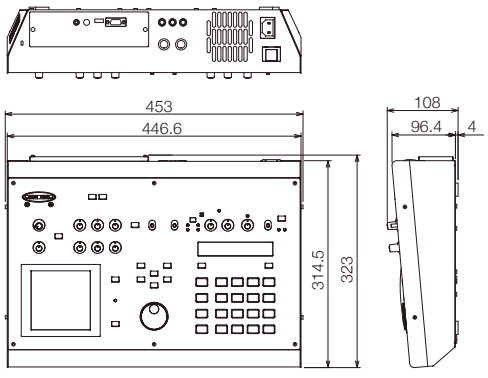
V-LINK



- **3D motion graphics from still images - all controllable in real-time**
- **2 separate layers of images enables overlay of a 3D moving title, logo or icon on a background moving image**
- **More than 200 Photo effects and more than 60 Overlay effects**
- **16 trigger pads, a twin D-Beam controller, an assignable X-Y pad, control knobs or an optional foot switch**
- **Adjustable frequency and peak detection provides graphic modulation based on the incoming audio**
- **VGA, S-video or composite video (NTSC or PAL) output**
- **MIDI compatibility with support for V-LINK enabled instruments**

Image flow within the CG-8

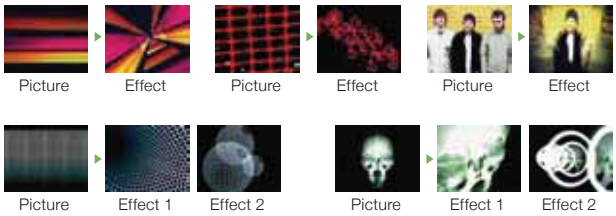




Unit: mm

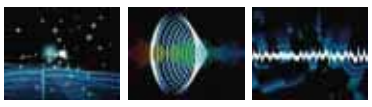
Visual Examples

EXAMPLE 1 (Image of Photo Layer)



EXAMPLE 2 (Image of Stamp Layer)

EXAMPLE 3 (Image of Combination)



Enable to composite
2 separate layers of 3D images.

SPECIFICATIONS CG-8

Video Format	VGA (640 x 480) 16.7 million colors (24-bit full color) (value is approximate), NTSC or PAL
Number of Photos	**Photos**: up to 48 JPEG files (512 x 384), **Stamp**: up to 16 PNG files (512 x 256)
Number of Patches	up to 128 patches per project
Connectors	**RGB output**: HD DB-15 type, **Video output**: S-Video output 4-pin mini DIN type (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohm), Composite RCA pin type (1.0 Vp-p, 75-ohm), **Audio Input L/R**: RCA pin type, **MIDI**: In, Out/Thru, **Foot Switch**, **Option** (for included Memory Card Adaptor)
Storage Device	**Internal**: Hard Disk Drive (for system program and data storage), **External**: Card Adaptor
Power Supply	AC 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	80 W
Dimensions	453 (W) x 323 (D) x 108 (H) mm 17-7/8 (W) x 12-3/4 (D) x 4-1/4 (H) inches
Weight	5.8 kg, 12 lbs. 13 oz.

F-1 | Video Field Recorder

Seamless 9 hours of HDV/DV/MPEG-2 TS recording to removable HDD or SSD including an additional 2 channels of PCM audio

for Windows 7/Vista®/Windows® XP

for Mac OS X

USB 2.0

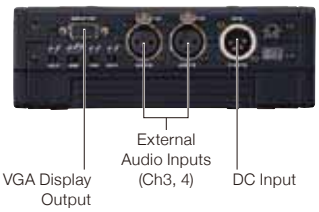
DV BLACK DIAMOND AWARD 2008

event DV Best of NAB 2008

Front Panel

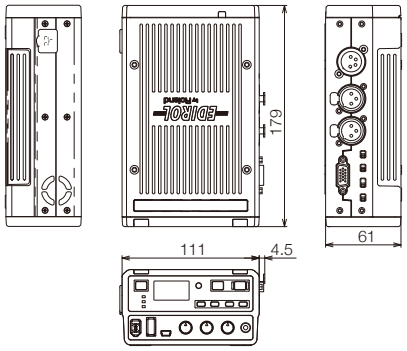
Left Side Panel

Right Side Panel



- **Compact hard disk drive HDV/DV/MPEG-2 TS recorder**
- **NTFS file format allows recording to the maximum disk capacity without a file limitation of 2GB or 4GB**
- **Up to 9 straight hours of recording with the 120GB HDD**
- **Removable HDD provides unlimited hours of recording in the field**
- **Shock-resistant floating HDD for secure & stable recording despite shocks and vibrations**
- **Additional 2 Channels of Audio - recording in high quality linear PCM WAV**
- **Audio gain controls and built-in phantom power for sensitive condenser mics**
- **Begin editing immediately directly off the HDD or enjoy smooth and speedy transfer of recorded data to your NLE system**
- **Three types of power – AC Adaptor, AA Battery, External Battery**

- **Thumbnail Display on External Monitor using the 15-pin D-Sub output jack**
- **Free downloadable software with 2 modes for quick clip preview and editing** * Free download from www.rolandsystemsgroup.net



Unit: mm

Options

F1-VMK1 V-Mount Kit

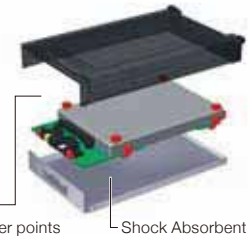
CB-F1
Carrying Bag

F1-HD120
Removable 120GB Hard Disk Drive

F1-SSD64
Removable 64GB Solid State Drive

Worry-Free Recording with Shock-Resistant Floating HDD

To protect the disk from the inevitable rigors of field use, the F-1's removable hard drive employs full floating HDD mount architecture with shock absorbent rubber that effectively dampens vibrations and shocks. Enjoy worry-free recording in locations where loud & heavy PA sounds or shocks from rough road surfaces might otherwise present capture problems.


Full Floating Architecture
Sixteen shock absorbent rubber points around the disk component dampens shocks and vibrations.
Shock Absorbent Rubber

SPECIFICATIONS F-1

Video Recording	Format: HDV (.m2t), DV (.dv), MPEG-2 TS (.m2t)
Audio Recording	Format: WAV (Supports BWF), Sampling Rate: 16-bit/48 kHz
Audio Control	Switch: Gain (MIC/-20 dB/LINE), Phantom Power +48 V (ON/OFF), Volume: Ch3 Input, Ch4 Input, Headphones
Audio Input Impedance	4 k-ohms
Headphones Output Impedance	16-ohms
Headphones Output Level	45 mW
Connectors	<Front Panel> i.LINK: 6-pin type conforms to IEEE1394 USB: A Type (For USB Storage device, USB Mouse) * Supports 2.0 Hi-Speed USB: mini B Type (For Computer) * Supports 2.0 Hi-Speed <Right Side Panel> Display Output: 15-pin mini D-sub Type (Analog RGB, 800 x 600 fixed resolution), Audio Input (Ch3/4): 3-pin XLR Type x 2, DC Input: 4-pin XLR Type <Left Side Panel> LAN: RJ45 Type (Ethernet 10/100Base-Tx)

Display	128 x 64 dots (Organic LED)
Recording Media	Hard Disk Drive (120 GB), Max Recording time Approx 9 hours (F1-HD120 as recording media, without audio) Option: Solid State Drive (64 GB) * removable unit
Power Supply	DC 9 V (AC Adaptor) * 9-16 V 2.0 A or HR15/51 x 8 or LR6 (AA) x 8
Operating Time	Nickel Metal Hydride Battery x 8: Approx 2 hours, External Battery (IDX Endura10 Li-Ion Battery): Approx 10 hours * These operation times are approximate. Actual time may vary somewhat.
Current Draw	1500 mA
Dimensions	111 (W) x 179 (D) x 61 (H) mm, 4-3/8 (W) x 7-1/6 (D) x 2-3/8 (H) inches
Weight	870 g/1 lb 15 oz (including HDD, excluding AC Adaptor and batteries)

Roland

R-4Pro | 4-Channel Portable Recorder and Wave Editor

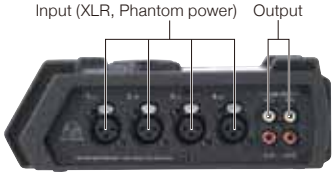
Portable 4-Channel Recorder with Superior Sound Quality and SMPTE Time Code sync function

for Windows® 7/ Windows Vista®/ Windows® XP/2000

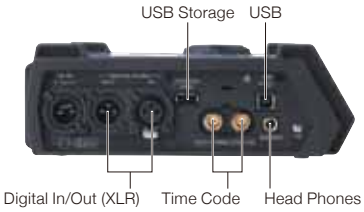
for Mac OS X

USB 2.0

Right Side Panel

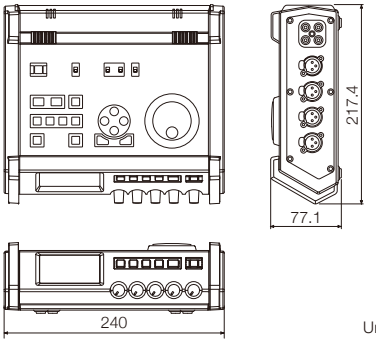


Left Side Panel



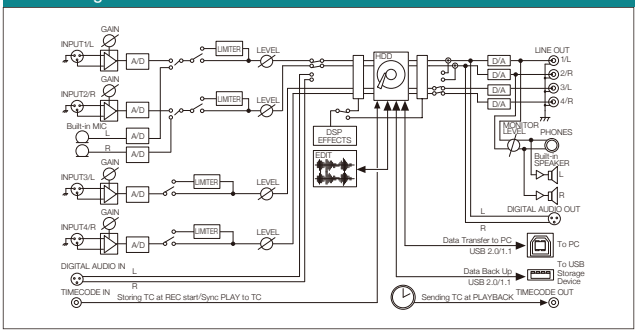
Instant backup via USB2.0

- **Up to 24-bit 192 kHz uncompressed linear PCM recording**
- **Simultaneous 4-Channel Recording/Individual monitoring of 4 channels**
- **AES/EBU Input/Output**
- **SMPTE Time Code In/Out for Video Sync**
- **80 GB Hard Disk Drive**
- **Pre-recoding function**
- **Waveform editing using only the R-4Pro**
- **Built-in high-quality effects**
- **Built-in stereo microphones and monitor speakers**
- **Three types of power – AC Adaptor, AA Battery, External Battery**



Unit: mm

Block Diagram



Recording Time (Stereo) Unit: hour

Sample Size	Sampling Frequency				
	44.1 kHz	48 kHz	88.2 kHz	96 kHz	192 kHz
16-bit	116	106	58	53	26
24-bit	77	70	38	35	17

* These recording times are approximate. Your actual results may vary somewhat.
* If more than one recorded file exists, the total recordable time will be less than these.

SPECIFICATIONS R-4Pro

Channels	4
Signal Processing	AD/DA Conversion: 24-bits Sampling Frequency: 44.1/48/88.2/96/192 kHz * Limited to Stereo x 1 when 192 kHz
Data Type	Format: BWF, WAV, Bit Depth: 16/24-bits, Sampling Frequency: 44.1/48/88.2/96/192 kHz
Recording Media	Internal Hard Disk Drive (80 GB)
Analog Inputs	Channel 1 to 4: XLR type (Phantom powered) Internal Microphones (Stereo)
Analog Outputs	LINE Out: RCA Pin type (Channel 1 to 4) Headphones: Stereo 1/4 inch phone type
Digital Input/Output	XLR type (AES/EBU, conforms to IEC 60958-4)
Input Impedance	Analog Input: 4 k-ohms
Nominal Input Level (Input Level Knob: Center)	(Variable) -56, -50, -44, -38, -32, -26, -20, -14, -8, -2, +4 dBu (Input Level Knob: -∞ to +8 dB)
Output Impedance	LINE Out: 950-ohms, Headphones: 10-ohms
Output Level	LINE Out: -10 dBu, Headphones: 40 mW + 40 mW
Residual Noise Level	LINE Out: -90 dBu, (SENS Knob: +4 dBu, Input Level Knob: Min)
Total Harmonic Distortion (THD + N)	0.01 % (SENS Knob: +4 dBu, Input Level Knob: Center)
Recommended Load Impedance for Headphones	32-ohms
Frequency Response	20 Hz to 40 kHz (0 to -3 dB)

Phantom Power	48+/-4 V/8 mA (Available 4 Channels simultaneously) * Should be less than 25 mA in total
USB Interface	A Type Connector (For USB Storage device) Supports USB 1.1 and 2.0 Mass Storage Device Class. B Type Connector (For Computer) Supports USB 1.1 and 2.0 Mass Storage Device Class.
SMPTE Timecode connectors	BNC Connectors (Conforms SMPTE 12M-1999)
Effect Unit Part	Effect Type: 3-BAND SHELVING EQ, 6-BAND GRAPHIC EQ, NOISE GATE, ENHANCER, COMPRESSOR AND DE-ESSER, MS MIC MIXING, NO EFFECT * Available to either recording or playing * Not available to recording in 192 kHz sampling frequency.
Power Supply	AC Adaptor (PSB-1U), Alkaline dry battery LR6 (AA) type x 8, or Nickel Metal Hydride battery (HR15/51) x 8 External Power Supply: 4-pin XLR type (9 to 16 V)
Current Draw	2.0 A
Dimensions	240 (W) x 217 (D) x 77 (H) mm 9-1/2 (W) x 8-9/16 (D) x 3-1/16 (H) inches
Weight	1.7 kg, 3 lbs. 12 oz.

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Roland

R-44 | 4-Channel Portable Recorder

A compact, solid-state, four channel portable audio recorder

for Windows® 7/ Windows Vista®/ Windows® XP/2000

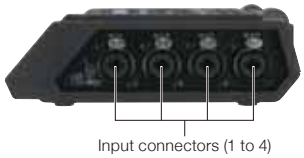
for Mac OS X

USB 2.0

Front Panel

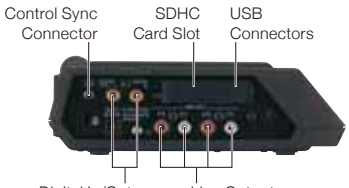
Headphone Jack

Right Side Panel



Input connectors (1 to 4)

Left Side Panel



- **Up to 24-bit 192 kHz uncompressed linear PCM recording (2 channels)**
- **SD or SDHC card as the recording media for quiet and reliable field recording**
- **Built-in limiter, low-cut filter, and studio class effects**
- **Pre-recording function**
- **Synchronized operation of 2 units enables up to 8 channels of recording**
- **Built-in stereo microphones and monitor speakers**
- **High-contrast Organic LED display**
- **Three types of power options: AC adaptor, external battery, or standard AA batteries**
  * Four hours of operation is possible with NiMH.
  * 44.1 kHz/16-bit/Stereo Recording, alkaline batteries, Phantom power: OFF.

Recording Time using 8 GB SDHC card (Unit: minute)

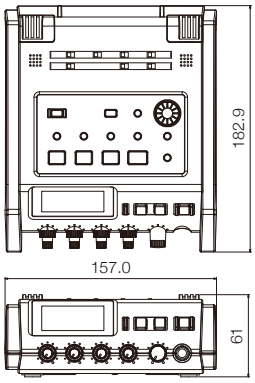
●Stereo Recording

Sampling Rate	Sampling Frequency			
	44.1 kHz	48 kHz	96 kHz	192 kHz
16-bit	755	694	347	173
24-bit	503	462	231	115

●4 channel Recording

Sampling Rate	Sampling Frequency			
	44.1 kHz	48 kHz	96 kHz	192 kHz
16-bit	377	347	173	—
24-bit	251	231	115	—

* Recording times are approximate. Actual results may vary.
* If more than one recorded file exists, the total recordable time will be less than listed.



Unit: mm

Option

CB-R44
Carrying Bag
Easy cable connection and media exchange.

SPECIFICATIONS R-44

Channels	4
Signal Processing	Sampling Bit Rate: 16/24-bit Sampling Frequency: 44.1 kHz/48 kHz/88.2 kHz/96 kHz/ 192 kHz (Limited to Stereo x 1 at 192 kHz) * 16 or 24-bit sampling rate can be selected with any frequency
Data Type	WAV/BWF
Recording Media	SDHC memory card (compatible with 64 MB to 32 GB)
Analog Input	Ch1 to 4: XLR/TRS Combo type, XLR type (phantom powered), TRS type (balanced/unbalanced), Stereo Built-in Microphones
Analog Output	Ch1 to 4: RCA Pin type (line output) Headphone: Stereo Phone type (1/4 inch)
Digital In/Out	RCA Pin type (IEC 60958-3)
Input Impedance	XLR: 4 k-ohms or greater (balanced) TRS: 6 k-ohms or greater (balanced)
Nominal Input Level (Input Level Knob: Center)	11 steps: -56, -50, -44, -38, -32, -26, -20, -14, -8, -2, +4 dBu (Input sense knob: -Inf. to +8 dB)
Maximum Input	+24 dBu (Input Sens Knob: +4 dBu)
Recommended Load Impedance	Line: 4 k-ohms or greater, Headphone: 16-ohms or greater
Output Level	Line Output: -20 dBu (fixed), Headphone: 40 mW + 40 mW
Total Harmonic Distortion + Noise Line (THD+N)	Output: 0.02 % (Input Sens: +4 dBu)

Noise Level	Line Output: -100 dBu (Input Sens: +4 dBu, Input Level: Center)
Residual Noise Level	Line Output: -103 dBu (Input Sens: +4 dBu, Input Level: Minimum)
Frequency Response	20 Hz to 40 kHz (0/-3 dB) Dynamic Range AD: 100 dB, DA: 104 dB
Phantom Power	48 V + or -4 V, 8 mA per 1 channel (20 mA or less in all channels)
USB Port	Mini-B Type Connecter * USB 1.1 or 2.0 High Speed (Mass Storage Class)
Control Sync	Jack Stereo Mini Type Jack, Word clock sync and start/stop remote control of 2 units * Remote control function does not guarantee the exact same REC start time
Display	128 x 64 dot organic LED
Power Supply	AC adaptor (PSB-1U), AA type battery x 4 (Alkaline or NiMH)
Current Draw	1.2 A
Dimensions	157 (W) x 183 (D) x 61 (H) mm, 6-3/16 (W) x 7-1/4 (D) x 2-7/16 (H) inches
Weight	1.3 kg, 2 lbs 14 oz (including batteries)
System Requirements	Microsoft® Windows® Vista®/XP/2000, Mac OS X 10.2 or later

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Roland

VC-50HD | Video Field Converter

Bi-directional, portable video conversion between HD/SD-SDI and MPEG-2 TS/HDV/DV

for Windows 7/Vista®/ Windows® XP

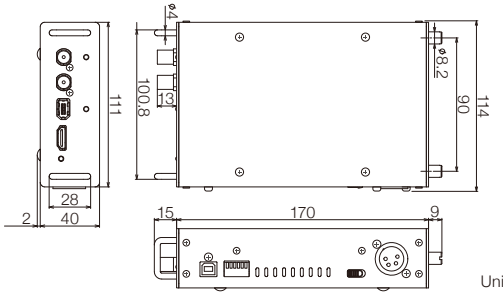
for Mac OS X

USB

IEEE1394

- **Bi-directional conversion between HD-SDI and HDV (19/25 Mbps) and 8/35/50 Mbps MPEG-2 TS**
- **Supports conversion between SD-SDI and DV format (25 Mbps) and 2/9/12 Mbps MPEG-2 TS**
- **Direct recording to the F-1 Video Field Recorder**
- **Directly capture and edit using your non-linear editing system**
- **Easy capture or archiving to Blu-ray/DVD via IEEE1394 (iLINK)**
- **HDMI Output allows flexible and convenient monitoring**
- **Setup and Control via PC and/or dip switches**
- **Three different types of power - AA battery x 8, AC Adaptor, External battery (4-pin XLR 9 to 20 V)**

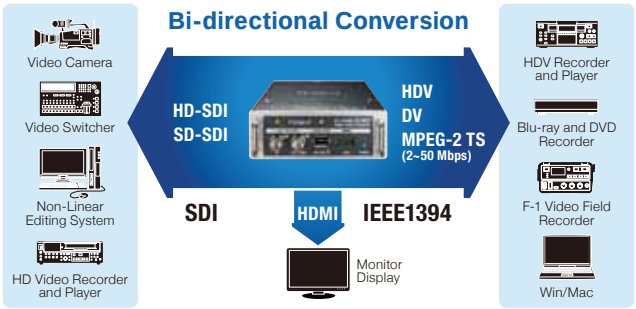
* Up/Down conversion, I/P conversion, NTSC/PAL conversion, Frame conversion are not supported.



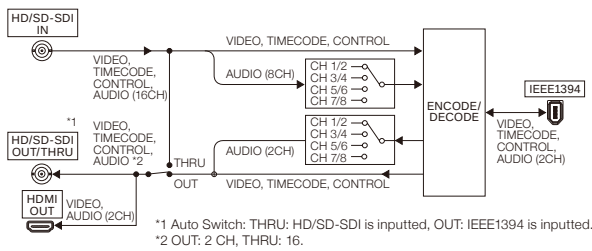
Unit: mm

Side Panel

Bi-directional Conversion



Block Diagram



*1 Auto Switch: THRU: HD/SD-SDI is inputted, OUT: IEEE1394 is inputted.
*2 OUT: 2 CH, THRU: 16.

The VC-50HD can pass the original time code and audio stream signals between HD/SD-SDI and IEEE1394.

SPECIFICATIONS VC-50HD

Video Input Format	<IEEE1394 (i-LINK)> HDV: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, DV: 480/59.94i, 576/50i, MPEG-2 TS: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 480/59.94i, 576/50i <HD/SD-SDI (SMPTE 259M-C, SMPTE 292M)> HD-SDI: 1080/59.94i, 1080/50i (SMPTE 274M), 720/59.94p, 720/50p (SMPTE 296M), SD-SDI: 487/59.94i, 576/50i (ITU-R BT.656-3, 4)
Video Output Format	<IEEE1394 (i-LINK)> HDV: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, DV: 480/59.94i, 576/50i, MPEG-2 TS 50/35/8*1 Mbps (HD): 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, MPEG-2 TS 12/9/2*1 Mbps (SD): 480/59.94i, 576/50i <HD/SD-SDI (SMPTE 259M-C, SMPTE 292M)> HD-SDI: 1080/59.94i, 1080/50i (SMPTE 274M), 720/59.94p, 720/50p (SMPTE 296M), SD-SDI: 487/59.94i, 576/50i (ITU-R BT.656-4) <HDMI> 1080/59.94i, 1080/50i, 720/59.94p, 720/50p, 480/59.94i, 576/50i
Audio Input	<IEEE1394> HDV: MPEG-1 Audio Layer2 16-bit 48 kHz 2ch 384 kbps, DV: Linear PCM 16-bit 48 kHz 2ch, MPEG-2 TS: MPEG-1 Audio Layer2 16-bit 48 kHz 2ch 384 kbps <HD/SD-SDI Embedded Audio> HD-SDI: Linear PCM 24-bit 48 kHz 2ch (SMPTE 299M), SD-SDI: Linear PCM 24-bit 48 kHz 2ch (SMPTE 272M-AC)
Audio Output	<IEEE1394> HDV: MPEG-1 Audio Layer2 16-bit 48 kHz 2ch 384 kbps, DV: Linear PCM 16-bit 48 kHz 2ch, MPEG-2 TS: MPEG-1 Audio Layer2 16-bit 48 kHz 2ch 384 kbps <HD/SD-SDI Embedded Audio> HD-SDI: Linear PCM 24-bit 48 kHz 2ch (SMPTE 299M), SD-SDI: Linear PCM 24-bit 48 kHz 2ch (SMPTE 272M-C) <HDMI> Linear PCM 24-bit 48 kHz 2ch
Timecode In/Out	<IEEE1394> HDV: Conforms to HDV Standard, DV: Conforms to IEC 61834-2, MPEG-2 TS: Conforms to IEC 13818-2 <HD/SD-SDI> HD-SDI: Conforms to SMPTE RP188 (VITC, LTC), SD-SDI: Conforms to SMPTE 266M, SMPTE RP188 (VITC, LTC)

Connectors	<IEEE1394 Connector (i.LINK)> 6-pin Type x 1 Conforms to IEEE1394-1995 <HD/SD-SDI Input Connector> BNC Type x 1 Conforms to SMPTE 259M-C, SMPTE 292M <HD/SD-SDI Output/Thru Output Connector> BNC Type x 1 Conforms to SMPTE 259M-C, SMPTE 292M <HDMI Output Connector> Type A (19-pin) x 1 <USB Connector> B Type x 1 Conforms to USB1.1 Full Speed <DC IN Connector> XLR 4-pin Type x 1 DC 9-20 V
Power Supply	AC Adaptor (PSB-1U) or External Battery (DC 9 to 20 V) or HR15/51 x 8 or LR6 (AA) x 8
Max Operation time	about 2 hour (Nickel Metal Hydride Battery), about 30 min (Alkaline Dry Battery), about 10 hour (External, IDX Endura10 Li-Ion Battery) * battery life will be changed according to the system situation.
Current Draw	2000 mA
Dimensions	114 (W) x 194 (D) x 42 (H) mm 1-1/2 (W) x 7-11/16 (D) x 1-11/16 (H) inches
Weight	620 g, 1 lb 6 oz (excluding batteries)
Accessories	Owner's Manual, AC Adaptor (PSB-1U), Conversion cable (AC Adaptor to XLR 4-pin type connector), AC Power Cord, Battery Case (for AA type battery x 8), Battery Plate Holder, mount screw for Battery Plate Holder x 8, Ferrate Core x 8

* Up/Down conversion, I/P conversion, NTSC/PAL conversion, Frame conversion are not supported.
* Parameter setup can be controlled by dip switch, dedicated utility software, or via the F-1 Video Recorder directly (Version 2.0).

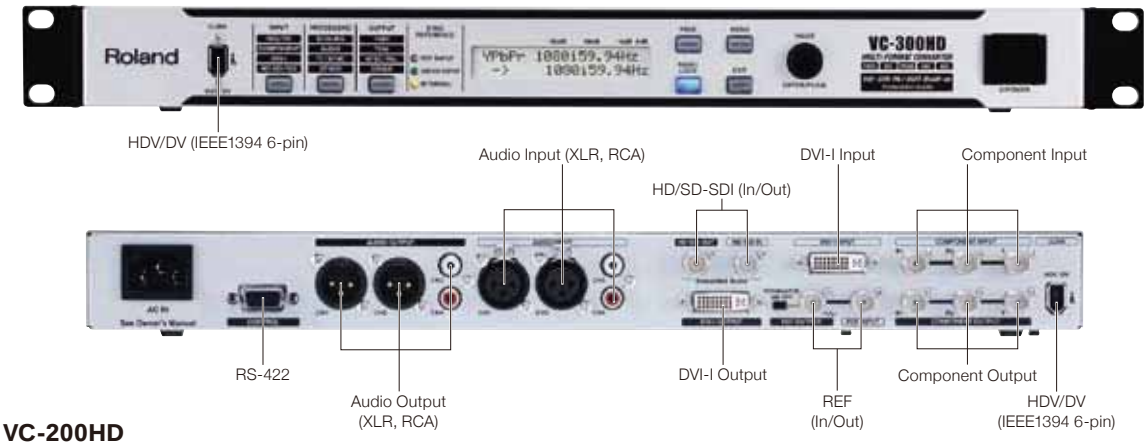
VC-300HD | Multi-format Video Converter　VC-200HD | Multi-format Video Converter

Bi-directional Multi-format Video Converter with embedded Audio support
Supports progressive conversion formats including 24p Frame Rates

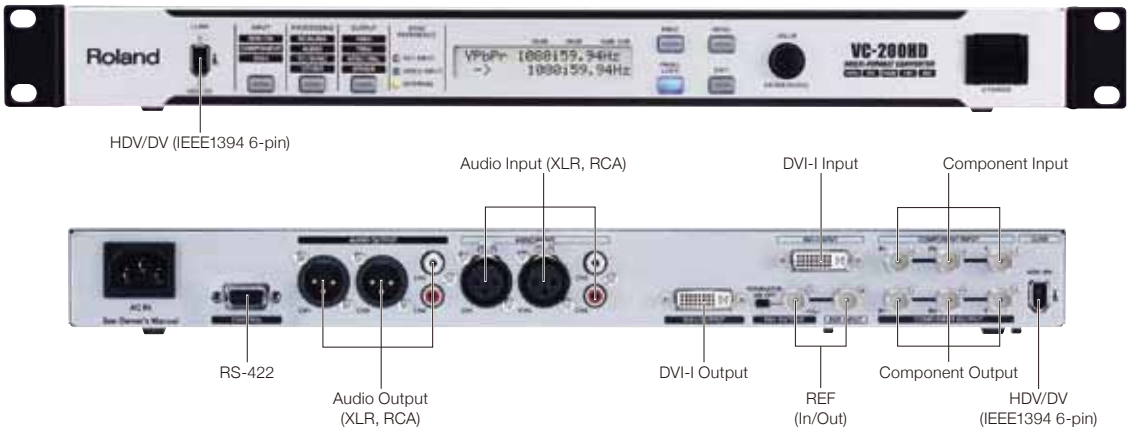
MULTI FORMAT

VC-300HD

1U

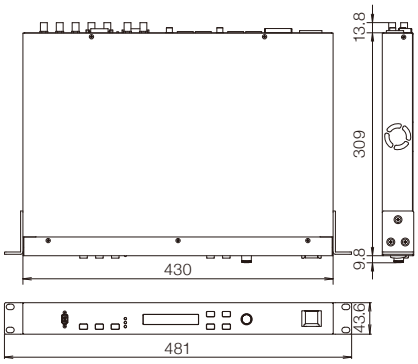


VC-200HD



- **Bi-directional video conversion between Digital and Analog, HD and SD, Compressed and Uncompressed**
- **High quality A/D and D/A with internal 4:4:4 10-bit signal processing**
- **Enables frame size scaling, change in frame rate and I<->P**
- **Gen Lock with external devices**
- **Time code and Embedded audio are available between HD/SD-SDI and HDV/DV conversion (VC-300HD only)**
- **Built-in high quality audio delay to achieve perfect lip sync**
- **Compatible with HDV/DV Cameras and VTR from SONY, Canon and JVC**
- **Support for 24p, 23.976p, 25p, 30p, 60p frame rates**

VC-300HD/VC-200HD Dimensions



Unit: mm

Format Conversion Table (○: available)

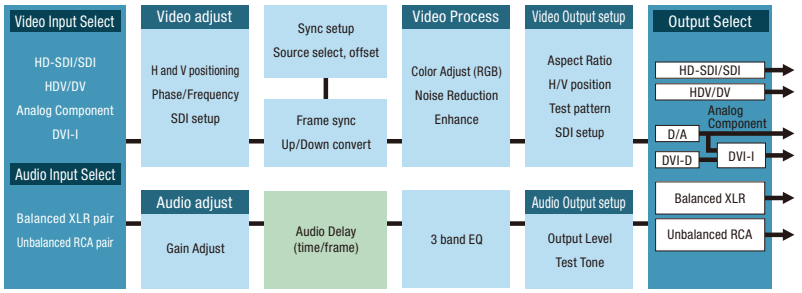
		OUTPUT FORMAT					
		HDV (1080i/720p)	DV	COMPONENT/ DVI-A**	DVI-D/ HDMI*	HD-SDI	SD-SDI
INPUT FORMAT	HDV (1080i/720p)	—	—	○	○	○	○
	DV	—	—	○	○	○	○
	COMPONENT	○	○	○	○	○	○
	DVI-A/RGB*	○	○	○	○	○	○
	DVI-D/HDMI*	○	○	○	○	○	○
	HD-SDI	○	○	○	○	○	○
	SD-SDI	○	○	○	○	○	○

For VC-300HD/VC-200HD　For VC-300HD only

* RGB and HDMI connection is needed to use conversion cable. HDMI audio and HDCP protection of HDMI are not supported.

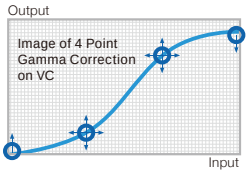
** DVI-A output is Y/Pb/Pr signal.

Multiple Video and Audio Processing Functions



* HDV/DV output is not available when input is HDV/DV.

Additional Features



● **4 Point Gamma Correction**
The newly added 4 points Gamma Correct function enables adjustment of bright/dark part independently. Enhances images to have a more film-like color.

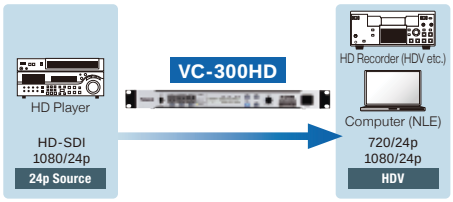
● **User Presets**
Parameters like input signal, conversion or processing can be saved to an internal memory. Up to 3 presets can be saved and enables convenient recall.

● **Remote Control**
Remotely control parameter setup of the VC from external devices, like a PC, via RS-422A Remote Terminal. This can be also used for parameter data backup.

Supports 24p Frame Rates

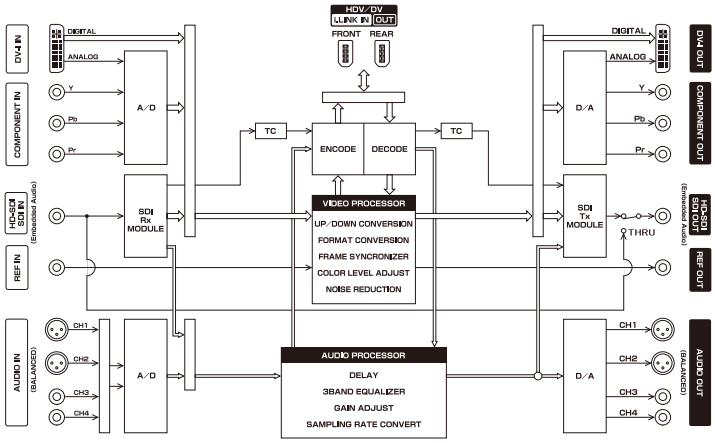
Supports 24p, 23.976p, 25p, 30p, 60p etc.
Enables conversion of footage shot with a variety of cameras.

● Enables use of affordable production system and media.



● Use HDV shooting devices with current production systems.

VC-300HD Block Diagram



SPECIFICATIONS VC-300HD/VC-200HD

Video Input Format	<IEEE1394 (i-LINK)> **HDV**: 1080/60i, 1080/50i, 1080/30P, 1080/25P, 1080/24P, 720/60P, 720/50P, 720/30P, 720/25P, 720/24P, 576/50P, 480/60P, **DV**: 576/50i, 480/60i, 480/24p <Analog Component> **Y/Pb/Pr**: 1080/60i, 1080/59.94i, 1080/50i, 1080/24PsF, 1080/23.98PsF, 720/60p, 720/59.94p, 720/50p, 576/50p, 576/50i, 480/59.94p, 480/59.94i <DVI-I> **Digital (RGB)**: 1600 x 1200/60 Hz, 1400 x 1050/60/75 Hz, 1360 x 768/60 Hz, 1280 x 1024/60/75 Hz, 1280 x 768/60 Hz, 1280 x 960/60 Hz, 1152 x 864/75 Hz, 1024 x 768/60/75 Hz, 800 x 600/60/75 Hz, 640 x 480/60/75 Hz, **Analog (RGB)**: 1024 x 768/60 Hz, 800 x 600/60/75 Hz, 640 x 480/60/75 Hz <**HD-SDI/SD-SDI**> * 1080/60i, 1080/59.94i, 1080/50i, 1080/30PsF, 1080/30p, 1080/29.97PsF, 1080/29.97p, 1080/25PsF, 1080/25p, 1080/24PsF, 1080/24p, 1080/23.98PsF, 1080/23.98p, 720/60p, 720/59.94p, 720/50p, 720/30p, 720/29.97p, 720/25p, 720/24p, 720/23.98p, 576/50i, 480/59.94i, 1080/24p (Over 60i), 1080/23.98p (Over 59.94i), 720/30p (Over 60p), 720/29.97p (Over 59.94p), 720/25p (Over 50p), 720/24p (Over 60p), 720/23.98p (Over 59.94p), 480/23p (Over 59.94i) <**Video Sampling Rate**> **SD**: 4:4:4 (Y/Cb/Cr), 10-bits, 13.5 MHz, **HD**: 4:4:4 (Y/Pb/Pr), 10-bits, 74.1758 MHz/74.25 MHz, **RGB**: 4:4:4 (R/G/B), 10-bits, 25 MHz to 90 MHz
Video Output Format	<IEEE1394 (i-LINK)> **HDV**: 1080/60i, 1080/50i, 1080/30, 1080/25, 1080/24P, 1080/24F, 1080/24A, 720/60P, 720/50P, 720/30P, 720/25P, 720/24P, 576/50P, 480/60P, **DV**: 480/60i (NTSC), 576/50i (PAL) <Analog Component> **Y/Pb/Pr** <DVI-I> **Digital RGB/Analog RGB**: 1080/60p, 1080/60i, 1080/59.94p, 1080/59.94i, 1080/50p, 1080/50i, 1080/30PsF, 1080/29.97PsF, 1080/25PsF, 1080/24PsF, 1080/23.98PsF, 720/60p, 720/59.94p, 720/50p, 576/50p, 576/50i, 480/59.94p, 480/59.94i, 1080/24p (Over 60i), 1080/23.98p (Over 59.94i), 720/30p (Over 60p), 720/29.97p (Over 59.94p), 720/25p (Over 50p), 720/24p (Over 60p), 720/23.98p (Over 59.94p) <**HD-SDI/SD-SDI**> * 1080/60i, 1080/59.94i, 1080/50i, 1080/30PsF, 1080/29.97PsF, 1080/25PsF, 1080/24PsF, 1080/23.98PsF, 720/60p, 720/59.94p, 720/50p, 480/59.94i, 576/50i, 1080/24p (Over 60i), 1080/23.98p (Over 59.94i), 720/30p (Over 60p), 720/29.97p (Over 59.94p), 720/25p (Over 50p), 720/24p (Over 60p), 720/23.98p (Over 59.94p)

Audio Input	<IEEE1394> **HDV**: MPEG1 Layer II 16-bit 48 kHz 384 kbps, **DV**: Linear PCM 16-bit 48 kHz, Nonlinear PCM 12-bit 32 kHz (2ch) <Analog> **Balanced XLR Type (ch1, ch2)**: +4 dBu, -2 dBu, -4 dBu, -10 dBu Selectable, **Unbalanced RCA pin type (ch3, ch4)**: +0 dBu, -6 dBu, -8 dBu, -14 dBu Selectable, **Audio Sampling Rate**: 24-bit, 48 kHz/32 kHz <**HD-SDI/SDI Embedded Audio (Only VC-300HD)**> Linear PCM 24-bit 48 kHz
Audio Output	<IEEE1394> **HDV**: MPEG1 Layer II 16-bit, 48 kHz, 384 kbps, **DV**: Linear PCM 16-bit, 48 kHz, Nonlinear PCM 12-bit, 32 kHz (2ch) <Analog> **Balanced XLR Type (ch1, ch2)**: +4 dBu, -2 dBu, -4 dBu, -10 dBu Selectable, **Unbalanced RCA pin type (ch3, ch4)**: +0 dBu, -6 dBu, -8 dBu, -14 dBu Selectable, **Audio Sampling Rate**: 24-bit, 48 kHz/32 kHz <**HD-SDI/SDI Embedded Audio**> Linear PCM 24-bit, 48 kHz
Video Processing	**Scaling**: Scaling between the specified input and output, **Frame Sync**: Built in frame synchronizer and genlock to external device, **Frame Rate Conversion**: from 59.94 to 50 Hz etc., **I/P Conversion**: De-interlace function built-in
Audio Processing	**Delay**: Adjustment with Millisecond or Frame **Sample Rate Conversion**: from 32 to 48 kHz etc.
Display	Character Type LCD: 20 characters, 2 lines (backlit LCD)
Power Supply	AC 117 V, AC 230 V, AC 220 V, AC 240 V (50/60 Hz)
Power Consumption	60 W
Dimensions	482 (430 without rack mount bracket) (W) x 309 (D) x 44 (H) mm 19 (16-15/16 without rack mount bracket) (W) x 12-3/16 (D) x 1-3/4 (H) inches
Weight	4.5 kg, 9 lbs 15 oz

VIDEO CONVERTERS

Roland

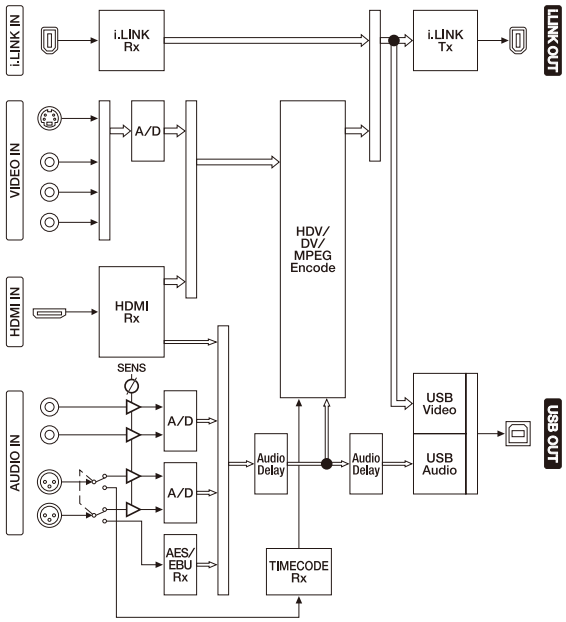
VC-30HD | Video Converter

Convert both analog/digital video format to IEEE1394 and USB audio/video streaming

Preliminary **Available in Summer 2011**

- Multi-format video format converter
- Supports USB Video/Audio for live streaming
- IEEE1394 Video I/O for capturing video and copying video
- Component, Composite, S-Video, HDMI for video input
- Analog audio and AES/EBU input for Audio input
- Supports SMPTE Time Code
- Audio delay function
- Easy and intuitive operation

Block Diagram



VIDEO EDITORS

Roland

DV-7DL G | Digital Video Workstation

An intuitive editing process is at the heart of the Direct Linear concept

Editor Screen

Accessories
ASCII keyboard, Optical mouse (PS/2), Mouse pad, AC cord, DV cable (1.5 m)

* Monitor display required. Use a monitor with support for XGA (1024 x 768 pixel) display and D-sub 15-pin connector.

- Dedicated hardware secures the most stable processing
- With constant backup of your project, your work is safe even in case of accidental power failure
- Most operations can be made from a single user-friendly edit menu screen
- Real-time process of dissolves, wipes, titling, keyers and audio effects like EQ/reverb without stopping the timeline playback
- Support for the import or export of video, still pictures, audio, or graphics data from the PC

SPECIFICATIONS DV-7DL G

Supported TV System	NTSC or PAL
Video Processing	**DV/DVCAM Video:** ITU601 (Y/Cr/Cb 4:2:2, 8-bit) **Audio:** PCM 48 kHz, 16-bit
Video Input/Output	DV Jack (i.LINK), 4-pin type (IEEE1394), S-Video Input 4-pin mini DIN type (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohm), Composite Input RCA pin type (1.0 Vp-p, 75-ohm), S-Video Output 4-pin mini DIN type (Y: 1.0 Vp-p, C: 0.286 Vp-p, 75-ohm), Composite Output RCA pin type (1.0 Vp-p, 75-ohm)
Audio Input/Output	**Input:** RCA pin type (L, R) x 1, Audio input 1/4 inch phone type (Mono), **Output:** RCA pin type (L, R) x 1, Headphones jack stereo 1/4 inch phone type
Display Output	HD DB-15 type (Analog RGB, resolution 1024 x 768 fixed), D-sub 15-pin
Storage Devices	**Internal Hard Disk Drive:** 80 GB (for system program and data storage), **Expansion Slot:** Removable Hard Disk 1 slot (for optional DV-HD series), CD-ROM Drive (Read Only)
Interfaces	**Serial Port:** PS/2 6-pin mini DIN type x 2 (for mouse and keyboard), Remote terminal (USB1.1) x 4
Power Supply	AC 117 V, 220 V, 230 V, 240 V (50/60 Hz)
Power Consumption	90 W
Dimensions	360 (W) x 420 (D) x 130 (H) mm 14-3/16 (W) x 16-9/16 (D) x 5-1/8 (H) inches
Weight	8.5 kg, 18 lbs. 12 oz.

* DV-7DLG is installed with software licensed by the following companies: Be Incorporated/Agfa Monotype Corporation.

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Product Information

Software/Firmware Updates

Owner and Reference Manuals

Installation Cases

Promotional Videos

Roland Systems Group, a member of the worldwide group of Roland companies, is dedicated to the support of audio and video professionals demanding excellence in both performance and system design. Through the development and support of video and audio products, we endeavor to improve workflow and maximize creative possibilities.

V-LINK is a technology designed for realtime audio and video integration. Using V-LINK, musicians can “play” video from their electronic instrument. Roland provides an integrated Audio and Visual solution.

Ensuring high quality while protecting the environment: Roland is ISO9001 and ISO14001 certified

At Roland, several group companies have obtained ISO9001 certification. In addition, in January 1999, Roland also received ISO14001 international environmental management system certification. We’re actively seeking ways to maintain harmony with the environment. (ISO=International Standardization Organization: an organization for the promotion of standardization of international units and terms. They provide different categories of certification: ISO9001 Series certification is a product quality certification for products that undergo a certain level of quality control from the design stage to the after service stage; ISO14001 Series certification is for environment-related standards. Each member of the Roland Group is striving to obtain certification.)

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